WANDO ALMANAC

FOR

1873

SC. W2

GREATLY INCREASED CROPS

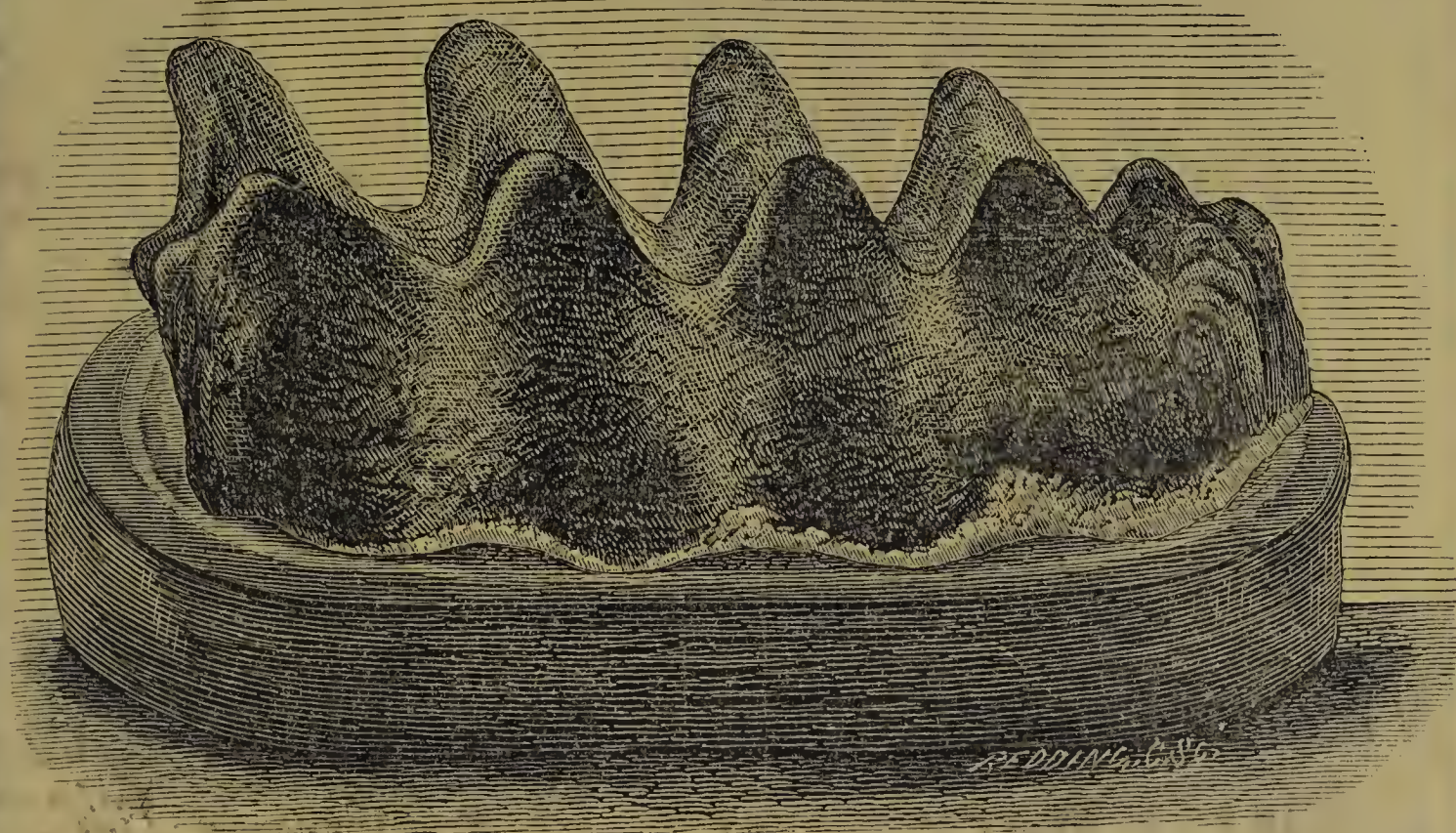
BY THE USE OF

THE BEST AND MOST RELIABLE HOME-MADE FERTILIZER,

"THE WANDO,"

MANUFACTURED BY THE

Wando Mining and Manufacturing Company.



WANDO ACID PHOSPHATE,

Containing a very high percentage of

SOLUBLE PHOSPHATE OF LIME.

Read the written Certificates of Planters using "THE WANDO," the *Pioneer Southern Fertilizer*, the *cheapest* because the *best* Manure in use.

Our Standard will be, "Not the same but better." We are determined to maintain the reputation of "THE WANDO," which it has justly earned.

WM. C. DUKES & CO., General Agents,

CHARLESTON, S. C.

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EXPLANATIONS.

The rising and setting of the Sun, as given for Charleston, will answer equally well for the greater part of South Carolina, Georgia and Alabama, as they depend chiefly on the *Latitude* of places.

It is not usual to give both risings and settings of the Moon, as one of these occurrences must take place daily while the Sun is above the horizon, when, of course, the Moon is unnoticed. For this reason the *rising* of the Moon is given from *Full* to *New*, and the *setting* from *New* to *Full*. The column calculated especially for Charleston will also answer for common purposes for other places in the States above mentioned, as the difference will seldom amount to more than a few minutes. The changes of the Moon, however, are given exactly for three different localities: Charleston, Montgomery and Tallahassee.

The times of high water each day are given for Charleston and Fort Pulaski, mouth of Savannah River. The tide at the wharves of the *City of Savannah is about one hour later daily than that at the mouth of the River.*

There are two high tides daily, but it is usual to put in our Almanacs but one—the one following immediately after the meridian passage of the Moon. The other one can be easily found, as it is midway between any two successive tides given in the tables.

All of these dates as to Sun, Moon, Tides, etc., in this Almanac, are given (as is usual now) in *mean* or *clock time.*

We give below a table showing the difference between Clock time and Sun time, which may be useful in setting a watch or clock by a meridian line or the Sun:

AN EQUATION TABLE,

Showing to the nearest minute how much the Sun is faster or slower than a perfect or well regulated clock.

Months.	Days.	Equation in Minutes.		Months.	Days.	Equation in Minutes.		Months.	Days.	Equation in Minutes.		Months.	Days.	Equation in Minutes.	
Jan.	1	4	Sun slower than the clock.	Mar.	31	4	Sun slower.	Aug.	7	5	Sun slower.	Oct.	23	16	Sun faster.
	3	5		April	3	3			14	4		Nov.	14	15	
	5	6			7	2			19	3			19	14	
	7	7			10	1			23	2			23	13	
	9	8			14	0			27	1			26	12	
	12	9							30	0			29	11	
	15	10			18	1	Sun faster.					Dec.	2	10	
	17	11			22	2		Sept.	3	1	Sun faster.		5	9	
	21	12			28	3			6	2			7	8	
	25	13		May	6	4			9	3			9	7	
	29	14			25	3			12	4			11	6	
Feb.	7	15		June	2	2			14	5			14	5	
	15	14			9	1			17	6			16	4	
	25	13			13	0			20	7			18	3	
Mar.	2	12							23	8			20	2	
	7	11			18	1	Sun slower.		26	9			22	1	
	11	10			24	2			29	10			24	0	
	14	9			27	3		Oct.	2	11					Sun slower.
	18	8		July	2	4			5	12			26	1	
	21	7			8	5			9	13			28	2	
	24	6			15	6			13	14			30	3	
	28	5							17	15					

CHARLESTON—Latitude.....32° 46′ 33″ North.

	H.	M.	S.	
Longitude.....	5	19	42.5	West Greenwich.
Longitude.....	0	11	31	West Washington.

Southern Pamphlets
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The Wando Fertilizer, the cheapest because the best.

CHRONOLOGICAL CYCLES FOR 1873.

Dominical Letter	E	Golden Number	12
Epact	1	Roman Indiction	1
Solar Cycle	6		

SEASONS.

		D.	H.	M.
Spring begins	March	20	7	44 A. M.
Summer begins	June	21	4	17 A. M.
Autumn begins	Sept.	22	6	27 P. M.
Winter begins	Dec.	21	0	24 P. M.

RELATIVE PLACES OF THE MOON.

Moon.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Apogee	16	12	11	7	5	2.30	29	24	20	17	14	12
Perigee	29	26	26	23	19	14	12	9	6	5	2.30	24
Highest	12	8	7	3	28	24	22	18	14	11	8	5.30
Lowest	26	22	21	18	15	11	9	5.31	1.28	1.26	22	19

Note.—Tides highest when the Moon is in Perigee, and lowest when in Apogee.

ECLIPSES IN 1873.

There will be four Eclipses, two of the Sun, and two of the Moon. Only one will be visible here, as follows: A total Eclipse of the Moon on the morning of May 12th, visible here as a partial Eclipse, as the Moon will set Eclipsed.

	D.	H.	M.
Moon enters Penumbra	May 12	3	7 A. M.
Moon enters Shadow	May 12	4	11 A M.

PLANETS.

Mercury will be visible as Evening Star January 5, May 3, August 30, and December 19; and as Morning Star March 18, July 15, and November 10.

Venus will be Evening Star (brightest about March 29) until May 5. It will then be Morning Star through the rest of the year.

Jupiter will be Evening Star until September 3. During the earlier months of the year it will be favorably situated for observation, rising about sunset in the latter part of February. February 5, Jupiter will be near Regulus, moving backward (westward) until April 17, when the Planet will be in the western edge of Leo. It will then resume its forward (eastern) motion, passing near Regulus again, June 25, and will be in the southern shoulder of Virgo.

Mars will be in opposition this year, April 26, and for several months will be conspicuous in the Constellation Libra. March 21, it is in Libra, and begins his rapid backward motion, which continues until June 7, when the Planet will be in Virgo, a few degrees east of Spica. Resuming its forward motion, it passes Antares, (in Scorpio,) September 10, and at the end of the year will be in Aquarius. November 20, Mars and Saturn will be close together in the head of Capricornus.

Saturn, during the year, passes through the eastern part of Sagittarius. Is in opposition July 21.

Wando, the Pioneer Southern Fertilizer, the *cheapest* because the *best* manure in use.

THE MOVABLE FEASTS OF THE CHURCH.

Septuagesima Sunday	February	9
Quinquagesima Sunday	February	23
Ash Wednesday	February	26
Palm Sunday	April	6
Rogation Sunday	May	4
Ascension Day	May	22
Whitsunday	June	1
Trinity Sunday	June	8
Advent Sunday	November	30

SIGNS OF THE PLANETS, ETC.

☉ Sun ☾ Moon ♀ Venus ☿ Mercury
♂ Mars ♃ Jupiter ♄ Saturn
☌ Conjunction, or having the same Longitude or Right Ascension.
☍ Opposition, or differing 180° in Longitude or Right Ascension.
□ Quadrature, or differing 90° in Longitude or Right Ascension.

THE SIGNS OF THE ZODIAC AND THE PARTS OF THE BODY THAT EACH SIGN WAS SUPPOSED TO GOVERN.

♈ Aries, the Ram, governs the Head and Face.

♊ Gemini, the Twins, governs the Arm.

♌ Leo, the Lion, governs the Heart.

♎ Libra, the Balance, governs the Reins.

♐ Sagittarius, the Archer, governs the Thighs.

♒ Aquarius, the Waterman, governs the Legs.

♉ Taurus, the Bull, governs the Neck.

♋ Cancer, the Crab, governs the Breast.

♍ Virgo, the Virgin, governs the Bowels.

♏ Scorpio, the Scorpion, governs the Secrets.

♑ Capricornus, the Goat, governs the Knees.

♓ Pisces, the Fishes, goxerns the Feet.

DATA.

1873d—Year of our Lord, or A.D.
6586th—Year of the Julian Period.
5633-34th—Year of the World, according to Jewish computation.
5873d—Masonic Year.
2626th—Year since the foundation of Rome.
97-8th—Year of American Independence.
84-5th—Year since the adoption of the Constitution.

ANNIVERSARIES.

The return of any stated day with the revolution of the year was called in old English and in German "Year-day." In modern, or Latinized English, it is called an anniversary, and is applied particularly to a day on which some remarkable, or interesting event, is annually commemorated. The periodical celebration of the striking facts of the past is doubtless as old as the division of time into periods.

The Jews, and some Gentile nations, kept religiously the first day of the month. The first day of the month Tizri, which was also the first day of the civil year, was celebrated by the imposing Feast of Trumpets.

Among the Jews, the Feast of the Passover celebrated the passing over of the Israelites on the night of the destruction of the first born of Egypt, and the exodus from the land of bondage; and the Feast of Pentacost commemorated the promulgation of the law on Mount Sanai. The Feast of Tabernacles recalled to the memory of the people the forty years their fathers had passed under tents in the wilds of Arabia.

The anniversaries of Greece presented an abridgement of her history, and were celebrated with the greatest enthusiasm and magnificence. The union of the people of Attica, under Theseus, and the battles of Marathon, Salamis and Platæa, were thus commemorated.

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JANUARY.
1st Month Begins
WEDNESDAY,
31 days.

1873.
Sun enters
AQUARIUS,
Monday, 20th.

Astronomical Notes for January.

The most brilliant constellations visible now. Aries overhead, Taurus and Orion in the east at 8 P. M. on the first of the month.

DAY OF Month	Week	Charleston, Geo. & Ala. Sun Rises	Sun Sets	Remarkable Events, Aspects, &c.	Sun's Declination. South. ° ′	Moon at Charleston Age at Noon	Place	Rises AND Sets	High Water at Chas'n	Sav'h.
1	W.	7 3	5 6	Emancipa'n Proc., 1863. ⊕ in Perigee	22 58	2 5	♒	7 59	9 51e	9 47e
2	T.	7 3	5 7	*Unsettled, cloudy and cold.*	22 53	3 5	♒	9 2	10 41	10 41
3	Fr.	7 3	5 7	♆ stationery	22 47	4 5	♓	10 9	11 30	11 31
4	S.	7 3	5 8	Newton born 1642.	22 41	5 5	♓	11 24	morn.	morn.
5	**S.**	7 4	5 9	*2d Sunday after Christmas.*	22 34	6 5	♈	morn.	12 20	12 21
6	M.	7 4	5 10	Epiphany.	22 27	7 5	♈	12 28	1 16	1 12
7	T.	7 4	5 11		22 19	8 5	♉	1 31	2 14	2 6
8	W.	7 4	5 11		22 11	9 5	♉	2 32	3 9	3 0
9	T.	7 4	5 12	Star of the West fired on, '61.	22 3	10 5	♊	3 34	4 20	4 9
10	Fr.	7 4	5 13	(9) Semmes sunk Hatteras, 1863.	21 54	11 5	♊	4 35	5 2	4 54
11	S.	7 3	5 14	Battle Arkansas Post, 1863.	21 45	12 5	♊	5 32	5 55	5 48
12	**S.**	7 3	5 15	*1st Sunday after Epiphany.*	21 35	13 5	♋	6 28	6 41	6 34
13	M.	7 3	5 16	*Frequent showers.* □ ♆ ☾	21 25	14 5	♋	rises.	7 29	7 22
14	T.	7 3	5 17	Bruce died 1329. ☌ ☉ ☾	21 14	15 5	♋	6 10	8 12	8 4
15	W.	7 3	5 18		21 3	16 5	♋	7 12	8 48	8 42
16	T.	7 2	5 19	Daniel Webster born 1782. ☌ ♃ ☾	20 52	17 5	♋	8 8	9 28	9 23
17	Fr.	7 2	5 19	□ ♂ ◍	20 40	18 5	♍	9 5	10 3	10 1
18	S.	7 2	5 20	Def't & d'th of Zollicoffer, 1862.	20 28	19 5	♍	10 2	10 42	10 42
19	**S.**	7 1	5 21	*2d Sunday after Epiphany.*	20 15	20 5	♎	10 54	11 19	11 21
20	M.	7 1	5 22	Battle of Cowpens, 1781.	20 2	21 5	♎	11 49	eve.	eve.
21	T.	7 1	5 23	*Clear cold.* ☌ ♂ ☾	19 49	22 5	♎	morn.	12 47	12 46
22	W.	7 0	5 24		19 35	23 5	♏	12 52	1 44	1 37
23	T.	7 0	5 25	Wm. Pitt died 1806. ☍ ♁ ☾	19 21	24 5	♏	1 50	2 37	2 29
24	Fr.	6 59	5 26	*Fair but cold.*	19 6	25 5	♐	2 48	3 44	3 34
25	S.	6 59	5 27	Conversion of St. Paul.	18 52	26 5	♐	4 0	4 53	4 44
26	**S.**	6 58	5 28	*3d Sunday after Epiphany.*	18 36	27 5	♑	5 6	5 58	5 51
27	M.	6 58	5 29	(26) Battle Tazewell, 1864. ☿ in Aphilion	18 21	28 5	♑	6 9	7 0	6 54
28	T.	6 57	5 30	Paris capitulated, 1871.	18 5	29 5	♒	sets.	7 54	7 46
29	W.	6 57	5 31		17 49	1 0	♒	7 35	8 46	8 38
30	T.	6 56	5 32	[Bar, 1863.	17 33	2 0	♓	8 58	9 32	9 27
31	F.	6 56	5 33	Blockade fleet driven off Chas'n ☌ ♀ ☾	17 16	3 0	♓	9 57	10 16	10 14

PHASES OF THE MOON FOR JANUARY.

CHARLESTON, S. C.	DAYS.	H.	M.	MONTGOMERY, ALA.	DAYS.	H.	M.	TALLAHASSEE, FLA.	DAYS.	H.	M.
First Quarter.	5	4	8 eve.	First Quarter..	5	3	42 eve.	First Quarter..	5	8	49 eve.
Full Moon.....	13	11	4 morn.	Full Moon.....	13	10	38 morn.	Full Moon.....	13	10	45 morn.
Last Quarter...	21	3	11 eve.	Last Quarter.	21	2	45 eve.	Last Quarter...	21	2	52 eve.
New Moon.....	28	12	8 eve.	New Moon.....	28	11	42 morn.	New Moon.....	28	11	49 morn.

Gardener's Work for January—Plant peas, beans in the low country, beets, onions, and eschalots, Irish potatoes, and horse radish. Sow Dutch turnips, spinach, lettuce, radishes, parsley, carrots, and salsify. Plant only early peas, and a few Irish potatoes. Artichokes must now be dressed, also asparagus beds; and this is the proper time to make hot beds for sowing early spring tomatoes, cucumbers, &c.

VEGETABLES IN SEASON THIS MONTH.—Ground artichoke, green glazed cabbage, ruta bagas, carrots, leeks, collards, spinach, turnips, parsnips, salsify.

Plantation Work for January—This is the month for preparing your planting-land for the next crop; but this work should always be commenced as soon as the last crop is harvested. In the low country, if mud, marsh, or rushes are used, this is a good time to haul out and spread in the alleys, and throw upon it a light listing. Repair fences, plough, ditch, drain and manure. You can sow oats for a first crop.

All agriculturists should subscribe for the "*Rural Carolinian*," and purchase the "*Rural Accountant*," the Southern Farm Book. Walker, Evans & Cogswell, Charleston, S. C.

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FEBRUARY.
2d Month, begins
SATURDAY,
28 Days.

1873.
Sun enters
PISCES
Wednesday, 19th.

Astronomical Notes for February.

On the first of the month, at 9 P. M., Taurus (with seven Stars) nearly overhead. Sirius in southeast, Great Bear in northeast, Leo rising in east, Pegarus setting in west.

DAY OF Month	Week	Charleston, Geo. & Ala. Sun Rises	Sun Sets	Remarkable Events, Aspects, &c.	Sun's Declination South. ° ′	Moon at Charleston: A Great Noon	Place	Rises AND Sets	High Water at Chas'n	Sav'h
1	S.	6 56	5 32	(2) Purification of B. V. Mary. ♃ ♌	16 59	4 0	♐	10 19	11 0	11 2
2	S.	6 55	5 33	*4th Sunday after Epiphany.*	16 41	5 0	♐	11 24	11 48	11 49
3	M.	6 54	5 34		16 24	6 0	♑	morn.	morn.	morn.
4	T.	6 53	5 35	*Fair and milder.* [gomery, Ala.	16 6	7 0	♑	12 28	12 41	12 40
5	W.	6 52	5 36	(4) 1st Confederate Congress at Mont-	15 48	8 0	♑	1 29	1 40	1 33
6	T.	6 51	5 37	Battle Fort Henry, 1862.	15 29	9 0	♒	2 28	2 35	2 27
7	Fr.	6 50	5 38	*Cold, with high wind.*	15 10	10 0	♒	3 26	3 40	3 30
8	S.	6 49	5 39	Queen Mary beheaded, 1587.	14 51	11 0	♓	4 22	4 41	4 32
9	S.	6 49	5 40	*Septuagesima Sunday.*	14 32	12 0	♓	5 13	5 34	5 26
10	M.	6 48	5 41	Queen Victoria married, 1840. ♂ ♁ ☾	14 13	13 0	♈	5 57	6 22	6 16
11	T.	6 47	5 42	*Look for rain.*	13 53	14 0	♈	rises.	7 4	6 57
12	W.	6 46	5 43	Bat. Fort Donaldson com. 1862. ♂ ♃ ☾	13 33	15 0	♈	6 3	7 48	7 40
13	T.	6 45	5 44	*Unsettled, with rain.*	13 13	16 0	♍	7 1	8 20	8 12
14	Fr.	6 44	5 45	St. Valentine's Day.	12 53	17 0	♍	7 58	8 56	8 50
15	S.	6 43	5 46	Capt. Cook killed, 1779.	12 32	18 0	♍	8 51	9 32	9 27
16	S.	6 42	5 47	*Sexagesima Sunday.*	12 11	19 0	♎	9 40	10 5	10 3
17	M.	6 41	5 48	(16) Fall of F. Donaldson, '62. ☿ gr. Hel.	11 50	20 0	♎	10 38	10 43	10 43
18	T.	6 40	5 48	(17) Columbia burnt, 1865. Lat. S.	11 29	21 0	♏	11 39	11 23	11 24
19	W.	6 39	5 49	(18) Charleston evacuated, '65.	11 8	22 0	♏	morn.	eve.	eve.
20	T.	6 38	5 50	Battle Olustee, Fla., '64.	10 46	23 0	♐	12 42	1 8	1 4
21	Fr.	6 37	5 51	*Rainy—milder.* ♂ ☿ ●	10 25	24 0	♐	1 43	2 15	2 8
22	S.	6 36	5 52	Washington born, 1732. Sup.	10 3	25 0	♑	2 48	3 28	3 18
23	S.	6 35	5 53	*Quinquagesima Sunday.*	9 41	26 0	♑	3 53	4 30	4 20
24	M.	6 34	5 54	St. Matthias.	9 18	27 0	♑	4 52	5 46	5 39
25	T.	6 33	5 55	Shrove Tuesday.	8 56	28 0	♒	5 46	6 42	6 35
26	W.	6 32	5 55	Ash Wednesday. *Clear.*	8 34	29 0	♒	sets.	7 35	7 27
27	T.	6 31	5 56	(23) J. Q. Adams died, 1848. ♂ ☿ ☾	8 11	0 6	♓	6 45	8 19	8 11
28	Fr.	6 30	5 56	(25) Bonaparte esc. from Elba,	7 49	1 6	♓	7 58	9 5	8 59

PHASES OF THE MOON FOR FEBRUARY.

CHARLESTON, S. C.	DAYS.	H.	M.
First Quarter.	4	4	46 morn.
Full Moon.....	12	6	14 morn.
Last Quarter...	20	6	4 morn.
New Moon.....	26	10	3 eve.

MONTGOMERY, ALA.	DAYS.	H.	M.
First Quarter..	4	4	20 morn.
Full Moon.....	12	5	48 morn.
Last Quarter...	20	5	38 morn.
New Moon.....	26	9	37 eve.

TALLAHASSEE, FLA.	DAYS.	H.	M.
First Quarter..	4	4	27 morn.
Full Moon.....	12	5	55 morn.
Last Quarter..	20	5	45 morn.
New Moon.....	26	9	44 eve.

Gardener's Work for February.—Continue to sow peas, and such vegetables as were omitted in January. Plant pole beans, first crop (in the low country ;) full crop Irish potatoes, beets and carrots; dress artichokes and asparagus. Tomatoes, peppers and cucumbers sow in hot beds; put out mangoes.

VEGETABLES IN SEASON THIS MONTH.—Ground artichoke, green glazed cabbage, ruta bagas, carrots, leeks, collards, spinach, turnips, parsnip, salsify.

Plantation Work for February.—This is considered the opening month of the planter's year. Continue preparing as in January. Sow oats for a full crop in the low country; plant Irish potatoes; make up sprout bed for sweet potatoes; plant root crop of sweet potatoes.

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MARCH.
3d Month begins
SATURDAY,
31 days.

1873.
Sun enters
ARIES,
Friday, 21st.

Astronomical Notes for March.

On the first of the month at 8 P. M., Sirius (dog star) is on the meridian to the South; Virgo rising in the East; Libra just above; Tarsus and Orion in the West.

DAY OF Month	Week	Charleston, Geo. & Ala. Sun Rises.	Sun Sets.	Remarkable Events, Aspects, &c.	Sun's Declination. South. ° ′	Moon at Charleston: Age at Noon.	Place.	Rises AND Sets.	High Water at Chas'n	Sav'h.
1	S.	6 28	5 58	(2) Great fire at N. O.,'53. ☌ ♆ ☾	7 26	2 6	♈	9 4	9 47	9 43
2	**S.**	6 26	5 59	*1st S. in Lent.*	7 3	3 6	♈	10 11	10 29	10 29
3	M.	6 25	5 59		6 40	4 6	♉	11 18	11 16	11 18
4	T.	6 24	6 0		6 17	5 6	♉	morn.	morn.	morn.
5	W.	6 23	6 1	Ember Day. *Clears for a while.*	5 54	6 6	♊	12 22	12 7	12 8
6	T.	6 21	6 2	Bank Eng. sus. payment, 1797.	5 30	7 6	♊	1 23	1 8	1 4
7	Fr.	6 20	6 3	Ember Day. Battle of Elk Horn.	5 7	8 6	♋	2 17	2 7	2 0
8	S.	6 19	6 4	Ember Day. Nav.bat. Hampton ♁ in Per-	4 44	9 6	♋	3 12	3 18	3 8
9	**S.**	6 18	6 4	*2d Sunday in Lent.* [Roads, '62. ihelion	4 20	10 6	♋	3 58	4 16	4 5
10	M.	6 16	6 5	(9) Fight bet. Virginia and	3 57	11 6	♌	4 39	5 8	4 59
11	T.	6 15	6 6	[Monitor, '62. ☌ ♃ ●	3 33	12 6	♌	5 14	5 57	5 50
12	W.	6 14	6 6	Hamilton died, 1804.	3 10	13 6	♍	5 42	6 36	6 29
13	T.	6 12	6 7		2 46	14 6	♍	rises.	7 15	7 8
14	Fr.	6 11	6 8	*Changeable.*	2 22	15 6	♍	6 43	7 50	7 42
15	S.	6 10	6 9	*Stormy, with rain.* ♃ stat'y	1 59	16 6	♎	7 40	8 23	8 15
16	**S.**	6 8	6 9	*3d Sunday in Lent.*	1 35	17 6	♎	8 38	8 58	8 50
17	M.	6 7	6 10	St. Patrick's Day.	1 11	18 6	♏	9 41	9 35	9 30
18	T.	6 6	6 11	☌ ♂ ☾	0 48	19 6	♏	10 31	10 12	10 10
19	W.	6 5	6 11		0 24	20 6	♏	11 40	10 54	10 56
20	T.	6 3	6 12	Sir Isaac Newton died, 1727.	0 0S	21 6	♐	morn.	11 48	11 49
21	Fr.	6 2	6 13	*Fair and mild.* ♂ stat'y	0 22N	22 6	♐	12 43	eve.	eve.
22	S.	6 1	6 14		0 46	23 6	♑	1 44	1 59	1 52
23	**S.**	5 59	6 14	*4th Sunday in Lent.*	1 10	24 6	♑	2 43	3 13	3 3
24	M.	5 58	6 15	(23) Battle Kernstown, 1862.	1 33	25 6	♒	3 35	4 27	4 16
25	T.	5 57	6 16	Annunciation B. V. M.	1 57	26 6	♒	4 17	5 34	5 27
26	W.	5 55	6 16	*Now a great change,* ☿ stat'y	2 20	27 6	♓	5 3	6 23	6 17
27	T.	5 54	6 17	*become milder, more*	2 44	28 6	♓	5 40	7 10	7 3
28	Fr.	5 53	6 18	*like Spring.*	3 7	0 2	♈	sets.	7 58	7 50
29	S.	5 51	6 18	Allied sovs. ent'd Paris, 1814. ☌ ☿ ☾	3 31	1 2	♈	7 46	8 37	8 29
30	**S.**	5 50	6 19	*5th Sunday in Lent.*	3 54	2 2	♉	8 54	9 17	9 12
31	M	5 49	6 20		4 17	3 2	♉	10 2	10 0	9 58

PHASES OF THE MOON FOR MARCH.

CHARLESTON, S. C.	DAYS.	H.	M.	MONTGOMERY, ALA.	DAYS.	H.	M.	TALLAHASSEE, FLA.	DAYS.	H.	M.
First Quarter.	5	8	6 eve.	First Quarter..	5	7	40 eve.	First Quarter..	5	7	47 eve.
Full Moon.....	14	12	25 morn.	Full Moon.....	13	11	59 eve.	Full Moon.....	14	12	6 morn.
Last Quarter...	21	5	0 eve.	Last Quarter...	21	4	34 eve.	Last Quarter...	21	4	41 eve.
New Moon.....	28	7	35 morn.	New Moon.....	28	7	9 morn.	New Moon.....	28	7	16 morn.

Gardener's Work for March—Plant bush squash, pumpkins, water and musk melons, okra, Guinea squash or egg plant, sugar beets, carrots, beans, peas, radishes, lettuce, corn, celery, (first crop,) tanyah, and mangoes in the low country and elsewhere as soon as danger from frost is over.

VEGETABLES IN SEASON THIS MONTH.—Ground artichoke, lettuce, spinach, asparagus, cabbage, carrots, parsnips, salsify.

Plantation Work for March—This is the first planting month for cotton, corn and rice. Plant your high lands first; leave the low lands for April. Plant rice about the 20th of the month.

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APRIL.
4th Month begins
TUESDAY,
30 Days.

1873.
Sun enters
TAURUS,
Sunday, 20th.

Astronomical Notes for April.

At 8 P. M. on the first of the month Taurus and Orion are sinking in the west, Cancer overhead, Leo and Virgo in the east, Great Bear nearly in the meridian north.

DAY OF Month	Week.	Charleston, Geo. & Ala. Sun Rises.	Sun Sets.	Remarkable Events, Aspects, &c.	Sun's Declination. North. ° ′	Moon at Charleston Age at Noon.	Place.	Rises AND Sets.	High Water at Chas'n	Sav'h.
1	T.	5 47	6 20	(2) Cobden died, 1865.	4 40	4 2	♊	11 04	10 50	10 50
2	W.	5 46	6 21	Petersburg attacked, 1865.	5 4	5 2	♊	morn.	11 41	11 42
3	T.	5 45	6 22	Richmond and Petersburg evac. '65.	5 27	6 2	♊	12 10	morn.	morn.
4	Fr.	5 44	6 23	[of A. S. Johnston.	5 49	7 2	♋	1 3	12 39	12 38
5	S.	5 42	6 23	(6) Battle of Shiloh, '63. Death ♂ ♁ ☾	6 12	8 2	♋	1 53	1 44	1 37
6	S.	5 41	6 24	*6th Sunday in Lent.—Palm Sunday.*	6 35	9 2	♋	2 38	2 39	2 31
7	M.	5 40	6 25	Ft. Sumter repulsed fleet,' 63.	6 57	10 2	♋	3 12	3 41	3 31
8	T.	5 38	6 25	♁ stat'y	7 20	11 2	♋	3 40	4 36	4 27
9	W.	5 37	6 26	Sebastopol stormed, 1855.	7 42	12 2	♍	4 16	5 22	5 14
10	T.	5 36	6 27	Battle Franklin, Tenn., 1863.	8 4	13 2	♍	4 44	6 3	5 56
11	Fr.	5 35	6 28	*Good Friday.*	8 26	14 2	♎	5 10	6 38	6 31
12	S.	5 33	6 28	(13) Anderson sur. Ft. Sumter, 1861.	8 48	15 2	♎	rises.	7 16	7 9
13	S.	5 32	6 29	*Easter Sunday.*	9 10	16 2	♏	7 28	7 55	7 47
14	M.	5 31	6 30	Lincoln shot by Booth, '65. ♂ ♁ ☾	9 32	17 2	♏	8 30	8 29	8 21
15	T.	5 30	6 30	Death of Pres. Lincoln, '65.	9 53	18 2	♏	9 33	9 30	9 24
16	W.	5 29	6 31	*Pleasant.*	10 14	19 2	♐	10 37	9 53	9 49
17	T.	5 27	6 32	♃ stat'y	10 35	20 2	♐	11 42	10 41	10 41
18	Fr.	5 26	6 32	*Frequent showers, with much thunder.*	10 56	21 2	♑	morn.	11 36	11 35
19	S.	5 25	6 33	Battle of Lexington, 1775.	11 17	22 2	♑	12 36	eve.	eve.
20	S.	5 24	6 34	*1st Sunday after Easter.*	11 38	23 2	♒	1 31	1 53	1 46
21	M.	5 23	6 35	(20) Louis Napoleon born, 1808. ●	11 58	24 2	♒	2 23	3 3	2 53
22	T.	5 22	6 35	Spanish fleet destroyed, 1657.	12 18	25 2	♓	3 00	4 11	4 0
23	W.	5 21	6 36	St. George. *Changes fair.*	12 38	26 2	♓	3 36	5 6	4 57
24	T.	5 20	6 37	Lovell evacuated N. O., 1862. ♂ ☿ ☾	12 58	27 2	♈	4 10	5 58	5 51
25	Fr.	5 19	6 37	St. Marks. ☿ in Aphelion	13 18	28 2	♈	4 48	6 42	6 35
26	S.	5 17	6 38	Sur. of Johnston's army, 1865.	13 37	29 2	♉	sets.	7 28	7 21
27	S.	5 16	6 39	*2d Sunday after Easter.*	13 56	0 8	♉	7 44	8 11	8 3
28	M.	5 15	6 40		14 15	1 8	♉	8 46	8 52	8 46
29	T.	5 14	6 41	2d battle Grand Gulf, 1863.	14 34	2 8	♊	9 50	9 37	9 33
30	W.	5 13	6 41	*Ends with rain.*	14 52	3 8	♊	10 53	10 25	10 25

PHASES OF THE MOON FOR APRIL.

CHARLESTON, S. C.				MONTGOMERY, ALA.				TALLAHASSEE, FLA.			
	DAYS.	H.	M.		DAYS.	H.	M.		DAYS.	H.	M.
First Quarter..	4	1	17 eve.	First Quarter..	4	12	51 eve.	First Quarter..	4	12	58 eve.
Full Moon.....	12	4	32 eve.	Full Moon.....	12	4	6 eve.	Full Moon.....	12	4	13 eve.
Last Quarter...	20	12	28 morn.	Last Quarter...	20	12	2 morn.	Last Quarter...	20	12	9 morn.
New Moon.....	26	5	23 eve.	New Moon.....	26	4	57 eve.	New Moon.....	26	5	4 eve.

Gardener's Work for April.—Whatever has been omitted in March do not neglect any longer. Sow green glazed cabbage, pickling cabbage, full crop of cauliflower and broccoli, okra, tomatoes, peppers, beets, carrots, leeks, melons, cucumbers, celery.

VEGETABLES IN SEASON THIS MONTH.—Lettuce, carrots, asparagus, cabbage, spinach, salsify.

Plantation Work for April.—Full crops of corn, cotton and rice should be put in during this month. Plant your low land corn. Commence early to hoe your young cotton, and thin out to a stand. Plant pumpkins for a field crop.

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MAY.
5th Month begins
THURSDAY,
31 Days.

1873.
Sun enters
GEMINI,
Wednesday, 21st.

Astronomical Notes for May.

At 8 P. M. on the first of the month Taurus is low in the west, Sirius is flaming in southwest, Great Bear just overhead in north.

DAY OF Month	Week.	Charleston, Geo. & Ala. Sun Rises.	Sun Sets.	Remarkable Events, Aspects, &c.		Sun's Declination. North. ° ′	Moon at Charleston Age at Noon.	Place.	Rises AND Sets.	High Water at Chas'n	Sav'h.
1	T.	5 12	6 42	St. Philip and St. James.		15 11	4 8	♋	11 54	11 17	11 18
2	Fr.	5 11	6 43	Farragut entered N. O., 1862.		15 28	5 8	♋	morn.	morn.	morn.
3	S.	5 10	6 43	Battle Chancellorsville, 1863.	☿ gr.	15 46	6 8	♌	12 32	12 10	12 11
4	✠.	5 9	6 44	*3d Sunday after Easter.*	elong W	16 4	7 8	♌	1 15	1 9	1 5
5	M.	5 9	6 45	(4) Nap. Bonaparte died, '21.	☌ ♀ ☰	16 21	8 8	♌	1 47	2 2	1 55
6	T.	5 8	6 45	Battle of Wilderness, 1863.	Inf.	16 38	9 8	♍	2 16	2 59	2 51
7	W.	5 7	6 46	(5) Battle Williamsburg, 1862.		16 54	10 8	♍	2 44	3 47	3 37
8	T.	5 6	6 47	Diocesan Con. P. E. Church		17 11	11 8	♎	3 10	4 38	4 29
9	Fr.	5 5	6 47	[meet in Chas'n.		17 27	12 8	♎	3 38	5 21	5 13
10	S.	5 4	6 48	Battle of Spottsylvania, 1864.		17 42	13 8	♎	4 6	6 3	5 55
11	✠.	5 3	6 49	*4th Sunday after Easter.*		17 58	14 8	♏	rises.	6 40	6 33
12	M.	5 3	6 50	(9) Schiller died, 1805.	♄ stat'y	18 13	15 8	♏	7 25	7 17	7 16
13	T.	5 2	6 51	*Stormy with thun. & lightning.*	□ ♃ ☰	18 28	16 8	♐	8 27	8 7	7 59
14	W.	5 1	6 51	(15) Battle Port Gibson, 1863.		18 42	17 8	♐	9 31	8 50	8 44
15	T.	5 1	6 52	Nav. eng'mt Drury's Bluff, '62.		18 57	18 8	♑	10 35	9 40	9 36
16	Fr.	5 0	6 53	(15) Battle of Resaca, 1864.		19 10	19 8	♑	11 30	10 34	10 34
17	S.	4 59	6 53		☿ gr. Hel.	19 24	20 8	♒	morn.	11 32	11 33
18	✠.	4 59	6 54	*5th Sunday after Easter.*	Lat. S.	19 37	21 8	♒	12 15	eve.	eve.
19	M.	4 58	6 55	Rogation Day.	♂ in ♌	19 50	22 8	♒	1 0	1 41	1 34
20	T.	4 57	6 56	(19) Columbus died, 1506.	Rogation Day	20 3	23 8	♓	1 46	2 38	2 30
21	W.	4 57	6 56	(19) Bat. front Vicksburg, '63.	Rog. Day	20 15	24 8	♓	2 9	3 41	3 31
22	T.	4 56	6 57	*Ascension Day.* Grant's attack		20 27	25 8	♈	2 42	4 39	4 30
23	Fr.	4 56	6 58	[and defeat at Vicksburg, '63.	☌ ♆ ☾	20 38	26 8	♈	3 13	5 29	5 21
24	S.	4 55	6 59	Jackson flanked Banks, 1862.		20 50	27 8	♉	3 47	6 15	6 9
25	✠.	4 55	7 0	*1st Sunday after Ascension.*		21 0	28 8	♉	4 24	7 1	6 54
26	M.	4 55	7 1	Victoria born, 1819.		21 11	0 3	♊	sets.	7 51	7 43
27	T.	4 54	7 1	Banks defeated.		21 21	1 3	♊	8 37	8 35	8 27
28	W.	4 54	7 2	*Changeable.*		21 31	2 3	♋	9 35	9 19	9 14
29	T.	4 53	7 2	Gen. Winfield Scott died. 1866.		21 40	3 3	♋	10 27	10 5	10 3
30	Fr.	4 53	7 2	Bat. 7 Pines. Bat. Fair Oaks, '62	☌ ♁ ☾	21 49	4 3	♋	11 9	10 50	10 52
31	S.	4 53	7 2	Lee put in com. Con. armies, '62		21 58	5 3	♌	11 46	11 38	11 39

PHASES OF THE MOON FOR MAY.

CHARLESTON, S. C.	DAYS.	H.	M.	MONTGOMERY, ALA.	DAYS.	H.	M.	TALLAHASSEE, FLA.	DAYS.	H.	M.
First Quarter..	4	7	14 morn.	First Quarter..	4	6	48 morn.	First Quarter..	4	6	55 morn.
Full Moon.....	12	5	58 morn.	Full Moon.....	12	5	32 morn.	Full Moon.....	12	5	39 morn.
Last Quarter...	19	5	41 morn.	Last Quarter...	19	5	15 morn.	Last Quarter..	19	5	22 morn.
New Moon.....	26	4	1 morn.	New Moon.....	26	3	35 morn.	New Moon.....	26	3	42 morn.

Gardener's Work for May—Plant snap beans and squashes. Sow cabbages for winter use, (home-seed,) cauliflower and broccoli, celery, beets, carrots and salsify. Plant cucumbers, melons, pumpkins for a late crop. Gather herbs for drying; always dry gently in the shade. Cut plants for distilling when in full growth, just as they begin to flower, and always select a dry day.

VEGETABLES IN SEASON THIS MONTH.—Peas, asparagus, snap beans, artichoke, squashes, potatoes, lettuce.

Plantation Work for May—Look well to your hoeings and ploughings. Continue to plant corn in low lands. Sow first crop of early (shinny) cow peas. Rice planting is generally postponed until June, as the birds are very bad in May, and the May bird is exceedingly destructive.

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JUNE.
6th Month begins
SUNDAY,
30 Days.

1873.
Sun enters
CANCER,
Saturday, 21st.

Astronomical Notes for June.

At 8 P. M. on the first of June, Virgo and Bootes nearly overhead, Lyra very bright in north east, Gemini, Cancer and Leo in the west, Scorpio in southeast.

DAY OF Month	Week.	Charleston, Geo. & Ala. Sun Rises.	Sun Sets.	Remarkable Events, Aspects, &c.	Sun's Declination. North. ° ′	Moon at Charleston Age at Noon.	Place.	Rises AND Sets.	High Water at Chas'n	Sav'h.
1	S.	4 52	7 3	*Whit Sunday.*	22 6	6 3	♋	morn.	morn.	morn
2	M.	4 52	7 3	Battle Coal Harbor, 1864.	22 14	7 3	♍	12 20	12 28	12 27
3	T.	4 52	7 4	(2) S. A. Douglas died, 1861.	22 21	8 3	♍	12 48	1 16	1 12
4	W.	4 52	7 5	(5) *Much wind and rain.*	22 28	9 3	♍	1 11	2 9	2 1
5	T.	4 52	7 5	Memphis, Tenn. captured,'62. Ember Day	22 35	10 3	♎	1 40	2 58	2 48
6	Fr.	4 51	7 5	Jackson def'd Fremont at X Keys, ♂ ♂ ☾	22 41	11 3	♎	2 1	3 44	3 34
7	S.	4 51	7 6	[and Shields at Port Republic,'62.	22 47	12 3	♏	2 30	4 37	4 26
8	S.	4 51	7 6	*Trinity Sunday.* [Sup.	22 53	13 3	♏	3 0	5 24	5 16
9	M.	4 51	7 7	Charles Dickens died, 1870. ♂ ☿ ●	22 58	14 3	♐	3 41	6 10	6 4
10	T.	4 51	7 7	St. Barnabas. ♀ gr. br ill'cy.	23 2	15 3	♐	4 20	7 0	6 57
11	W.	4 51	7 8	Bat. Trevillian Stat., 1864	23 7	16 3	♐	rises.	7 50	7 42
12	T.	4 51	7 8	Harper's Ferry abandoned,'61.	23 11	17 3	♑	9 17	8 40	8 33
13	Fr.	4 51	7 8	*Fair and quite warm.*	23 14	18 3	♑	10 13	9 36	9 31
14	S.	4 51	7 9	Magna Charter sealed, 1215.	23 17	19 3	♒	11 5	10 26	10 24
15	S.	4 51	7 9	*1st Sunday after Trinity.*	23 20	20 3	♒	11 42	11 20	11 18
16	M.	4 51	7 10	Battle Secessionville, S.C., 1862.	23 22	21 3	♓	morn.	eve.	eve.
17	T.	4 51	7 10	W. G. Simms died, 1870.	23 24	22 3	♓	12 10	1 13	1 9
18	W.	4 52	7 10	Con. frig. Alabama sunk, '64.	23 25	23 3	♈	12 42	2 13	2 5
19	T.	4 52	7 11	Queen Victoria crowned, 1837. ♂ ♆ ☾	23 26	24 3	♈	1 17	3 8	2 58
20	Fr.	4 52	7 11	*Changeable with warm weather*	23 26	25 3	♉	1 46	4 4	3 54
21	S.	4 52	7 11	*Summer has set in.* ♂ ♀ ☾	23 27	26 3	♉	2 19	5 1	4 52
22	S.	4 52	7 11	*2d Sunday after Trinity.*	23 27	27 3	♊	2 55	5 55	5 48
23	M.	4 52	7 11		23 26	28 3	♊	3 36	6 42	6 35
24	T.	4 53	7 11	Nat. St. John Baptist.	23 25	29 3	♊	4 24	7 31	7 23
25	W.	4 53	7 11	Repeal of British corn laws, 1864.	23 23	0 8	♋	sets.	8 14	8 6
26	T.	4 53	7 12	Bat. Mechanicsville & Beaver Dam ♂ ♀ ☾	23 22	1 8	♋	8 56	8 56	8 51
27	Fr	4 54	7 12	Bat. Gaines' Mill, 1862. ['62	23 19	2 8	♌	9 37	9 42	9 38
28	S.	4 54	7 12	Bat. Chickahominy, 1862. ♀ in Aphilion	23 17	3 8	♌	10 11	10 24	10 22
29	S.	4 54	7 12	*3d Sunday after Trinity.*	23 13	4 8	♌	10 48	11 2	11 4
30	M.	4 55	7 12	(29) St. Peter.	23 10	5 8	♍	11 18	11 43	11 44

PHASES OF THE MOON FOR JUNE.

CHARLESTON, S. C.	DAYS.	H.	M.
First Quarter..	3	1	0 morn.
Full Moon.....	10	4	42 eve.
Last Quarter.	17	10	13 morn.
New Moon.....	24	3	53 eve.

MONTGOMERY, ALA.	DAYS.	H.	M.
First Quarter..	3	12	34 morn.
Full Moon.....	10	4	16 eve.
Last Quarter...	17	9	47 morn.
New Moon.....	24	3	27 eve.

TALLAHASSEE, FLA.	DAYS.	H.	M.
First Quarter..	3	12	41 morn.
Full Moon.....	10	4	23 eve.
Last Quarter...	17	9	54 morn.
New Moon.....	24	3	34 eve.

Gardener's Work for June—Sow full crops of cabbages for fall and winter use. Cauliflowers and brocoli may yet be sown, also a few carrots. Continue to sow tomatoes, okra, radishes, snap beans. Transplant leeks; pull and dry onions, garlic and eschalots. A few cucumbers and melons plant for a late crop, and a few ruta baga turnip seeds.

VEGETABLES IN SEASON THIS MONTH.—Beets, potatoes, peas, squashes, snap beans, cucumbers, artichoke, onions.

Plantation Work for June—Keep steadily at the plough and hoe; this is the most important grass month! If the vines from your sweet potato sprout-bed are fit, you can draw and plant out first good rain. Sow cow peas between your corn hills or rows. The end of this month is a good time to put in the first crop of standing field peas.

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JULY.
7th Month begins
TUESDAY,
31 Days.

1873.
Sun enters
LEO,
Wednesday, 23d.

Astronomical Notes for July.

At first of the month Bootes (with its brightest star Arcturus) is overhead, Libra on meridian south, Scorpio further east, Leo and Virgo to west of meridian.

DAY OF Month	Week	Charleston, Geo. & Ala. Sun Rises	Sun Sets	Remarkable Events, Aspects, &c.	Sun's Declination North ° ′	Moon at Charleston Age at Noon	Place	Rises AND Sets	High Water at Chas'n	Sav'h
1	T.	4 55	7 12	Battle of Malvern Hill, 1862.	23 6	6 8	♍	11 46	morn.	morn.
2	W.	4 56	7 12	*Rain—unsettled.*	23 2	7 8	♎	morn.	12 24	12 23
3	T.	4 56	7 12	Battle of Gettysburg, 1863. ☌ ☿ ☉	22 57	8 8	♎	12 12	1 13	1 9
4	Fr.	4 57	7 11	Declaration Independence, '76	22 52	9 8	♎	12 33	2 1	1 54
5	S.	4 57	7 11	(4) Surrender Vicksburg, '63.	22 46	10 8	♏	1 1	2 57	2 47
6	S.	4 58	7 11	*4th Sunday after Trinity.*	22 40	11 8	♏	1 35	3 50	3 40
7	M.	4 59	7 11	(6) Execution of Mrs. Surrat, 1865.	22 34	12 8	♐	2 16	4 51	4 42
8	T.	4 59	7 11	Great fire at Montreal, 1852.	22 27	13 8	♐	3 2	5 49	5 41
9	W.	4 59	7 10		22 20	14 8	♑	3 59	6 44	6 37
10	T.	5 0	7 10	End Morris Island taken, '63. ☌ ♄ ☽	22 12	15 8	♑	5 6	7 42	7 34
11	Fr.	5 1	7 10	Battle at Fort Wagner, 1863.	22 5	16 8	♒	rises.	8 34	8 27
12	S.	5 1	7 9		21 56	17 8	♒	9 31	9 23	9 18
13	S.	5 2	7 9	*5th Sunday after Trinity.*	21 48	18 8	♓	10 10	10 12	10 10
14	M.	5 3	7 9	*Fair and very warm.* ♀ gr.	21 39	19 8	♓	10 43	10 58	11 0
15	T.	5 3	7 8	elong W.	21 29	20 8	♈	11 23	11 48	11 47
16	W.	5 4	7 8	1st French Revolution, 1789. ☌ ♆ ☾	21 20	21 8	♈	11 48	eve.	eve.
17	T.	5 5	7 8		21 9	22 8	♉	morn.	1 34	1 30
18	Fr.	5 5	7 7	Battle at Fort Wagner, 1863.	21 0	23 8	♉	12 17	2 35	2 27
19	S.	5 6	7 7	France dec'd war against Prussia.	20 48	24 8	♉	12 42	3 39	3 29
20	S.	5 7	7 7	*6th Sunday after Trinity.*	20 37	25 8	♊	1 29	4 41	4 30
21	M.	5 7	7 6	Battle of Bull Run, 1861.	20 25	26 8	♊	2 12	5 37	5 30
22	T.	5 8	7 5	Battle in front of Atlanta, '64, ☌ ♄ ●	20 14	27 8	♋	3 3	6 28	6 22
23	W.	5 8	7 5	*Changeable.* [1865.	20 1	28 8	♋	3 59	7 14	7 7
24	T.	5 9	7 5	2d Atlantic Cable commenced, ☌ ☉ ☾	19 49	0 3	♌	sets.	8 2	7 54
25	Fr.	5 10	7 4	St. James. *Changeable—rainy.*	19 36	1 3	♌	7 17	8 39	8 31
26	S.	5 10	7 4		19 23	2 3	♍	8 48	9 12	9 7
27	S.	5 11	7 4	*7th Sunday after Trinity.*	19 9	3 3	♍	9 17	9 50	9 46
28	M.	5 12	7 3	(27) Atlantic Cable finished, '66	18 55	4 3	♍	9 41	10 27	1 25
29	T.	5 12	7 2	(28) Battle before Atlanta, '64. ☌ ☉ ●	18 41	5 3	♎	10 10	11 0	11 2
30	W.	5 12	7 1	Explosion at Petersburg, '64.	18 27	6 3	♎	10 36	11 40	11 36
31	T.	5 13	6 59	Ignatius Loyola died, 1556.	18 12	7 3	♎	11 2	morn.	morn.

PHASES OF THE MOON FOR JULY.

CHARLESTON, S. C.	DAYS.	H.	M.	MONTGOMERY, ALA.	DAYS.	H.	M.	TALLAHASSEE, FLA.	DAYS.	H.	M.
First Quarter..	2	5	51 eve.	First Quarter..	2	5	25 eve.	First Quarter...	2	5	32 eve.
Full Moon.....	10	1	14 morn.	Full Moon.....	10	12	48 morn.	Full Moon.....	10	12	55 morn.
Last Quarter...	16	3	39 eve.	Last Quarter...	16	3	13 eve.	Last Quarter...	16	3	20 eve.
New Moon.....	24	5	14 morn.	New Moon.....	24	4	48 morn.	New Moon.....	24	4	55 morn.

Gardener's Work for July.—Sow cabbages, but protect from hot sun when young. Water at night. Plant snap beans and a few Irish potatoes. Continue to sow radishes, lettuce, endive, cress, mustard, and small salading. The early Dutch turnip is the best to sow for the first crop; follow with yellow Swedish or ruta baga.

VEGETABLES IN SEASON THIS MONTH.—Tomatoes, okra, squashes, beets, corn, onions, Guinea squash, cucumbers, snap beans, potatoes, cabbage, melons.

Plantation Work for July.—Now do not omit to sow full crops of standing cow peas. Sow a few turnips, carrots and beets as field crops, though the hot suns are apt to destroy them; should they escape they will be fine; the next month is the best time for these crops. Plant potato vines. Strip and cure fodder.

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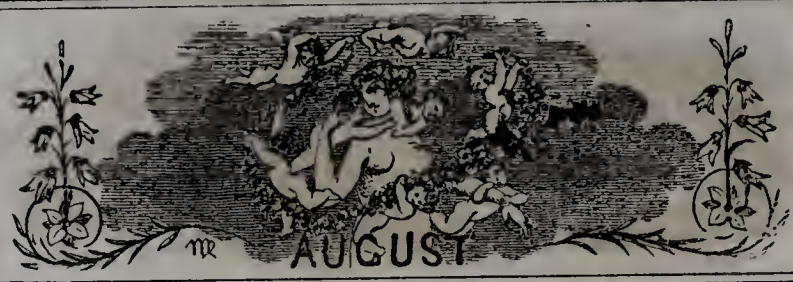
AUGUST.
8th Month begins
FRIDAY,
31 Days.



1873.
Sun enters
VIRGO,
Saturday, 23d.

Astronomical Notes for August.

August 1st, at 8 P. M., Dragon's Head is on the Meridian in the north, Hercules overhead, Scorpio on meridian south, Leo sinking in West.

DAY OF Month	Week.	Charleston, Geo. & Ala. Sun Rises.	Sun Sets.	Remarkable Events, Aspects, &c.	Sun's Declination. North. ° ′	Moon at Charleston Age at Noon.	Place.	Rises AND Sets.	High Water at Chas'n	Sav'h.
1	Fr.	5 14	6 58	☌ ♂ ☾	17 57	8 3	♏	11 31	12 22	12 21
2	S.	5 14	6 57	Battle Folly Island, 1863.	17 42	9 3	♏	morn.	1 15	1 11
3	**S.**	5 15	6 56	*8th Sunday after Trinity.*	17 26	10 3	♐	12 2	2 15	2 7
4	M.	5 16	6 55	Battle Weissenburg, 1870.	17 10	11 3	♐	12 56	3 22	3 12
5	T.	5 16	6 54	Battle Baton Rouge, 1862.	16 54	12 3	♑	1 36	4 26	4 15
6	W.	5 17	6 53	(5) Battle Mobile Bay, 1864.	16 40	13 3	♑	2 38	5 33	5 26
7	T.	5 18	6 52	Battle of Worth, 1870. ☌ ♄ ☾	16 21	14 3	♑	3 45	6 34	6 28
8	Fr.	5 19	6 52	Battle Oak Hill, 1861.	16 4	15 3	♒	4 57	7 28	7 20
9	S.	5 20	6 51	Battle Cedar Mountain, 1862.	15 46	16 3	♓	rises.	8 16	8 8
10	**S.**	5 21	6 50	*9th Sunday after Trinity.*	15 29	17 3	♓	8 45	8 57	8 52
11	M.	5 21	6 49	*Sultry and very warm nights.*	15 11	18 3	♈	9 19	9 50	9 46
12	T.	5 22	6 48	□ ♂ ●	14 53	19 3	♈	9 52	10 33	10 33
13	W.	5 23	6 47	(14) Battle near Metz, 1870.	14 35	20 3	♈	10 25	11 19	11 21
14	T.	5 24	6 46	Battle Strawberry Plains, '64.	14 16	21 3	♉	10 59	eve.	eve.
15	Fr.	5 24	6 45		13 58	22 3	♉	11 36	1 10	1 6
16	S.	5 25	6 43	(17) Frederick the Great died, 1786.	13 39	23 3	♊	morn.	2 14	2 6
17	**S.**	5 26	6 42	*10th Sunday after Trinity.*	13 20	24 3	♊	12 16	3 21	3 11
18	M.	5 26	6 41	(17) Fort Sumter bomb'd, '63.	13 0	25 3	♋	1 5	4 22	4 11
19	T.	5 27	6 40	(18) Bat. of Gravelotte, 1870. ☌ ♀ ☾	12 41	26 3	♋	2 0	5 20	5 12
20	W.	5 27	6 39	*Changeable.*	12 21	27 3	♋	2 59	6 8	6 2
21	T.	5 28	6 38	Battle Bowling Green, Ky. '62.	12 1	28 3	♌	3 56	6 53	6 47
22	Fr.	5 29	6 36	*Quite stormy with much thunder* ☿ stat'y	11 41	29 3	♌	4 53	7 32	7 24
23	S.	5 29	6 35	Charleston shelled, 1863.	11 21	0 7	♍	sets.	8 10	8 2
24	**S.**	5 30	6 34	*11th Sunday after Trinity.*	11 6	1 7	♍	7 45	8 45	8 37
25	M.	5 31	6 33	(24) St. Bartholomew.	10 39	2 7	♍	8 10	9 13	9 8
26	T.	5 31	6 32	Wise defeated Tyler at Cross	10 18	3 7	♎	8 38	9 49	9 45
27	W.	5 32	6 31	[Lanes, 1861.	9 57	4 7	♎	9 4	10 25	10 23
28	T.	5 32	6 30	Battle Centreville, 1862.	9 36	5 7	♏	9 30	11 1	11 3
29	F.	5 33	6 29	(28) England abolished slavery, '33.	9 15	6 7	♏	10 1	11 47	11 49
30	S.	5 33	6 28	3 days battles of 2d Manassas, ☌ ♁ ☾	8 53	7 7	♏	10 42	morn.	morn.
31	**S.**	5 34	6 26	*12th Sunday after Trinity.* ['62.	8 32	8 7	♐	11 28	12 37	12 38

PHASES OF THE MOON FOR AUGUST.

CHARLESTON, S. C.	DAYS.	H.	M.
First Quarter.	1	9	10 morn.
Full Moon.....	8	8	33 morn.
Last Quarter...	14	11	22 eve.
New Moon.....	22	8	11 eve.
First Quarter.	30	10	29 eve.

MONTGOMERY, ALA.	DAYS.	H.	M.
First Quarter...	1	8	44 morn.
Full Moon.....	8	8	7 morn.
Last Quarter....	14	10	56 eve.
New Moon.....	22	7	45 eve.
First Quarter...	30	10	3 eve.

TALLAHASSEE, FLA.	DAYS.	H.	M.
First Quarter..	1	8	51 morn.
Full Moon.....	8	8	14 morn.
Last Quarter...	14	11	3 eve.
New Moon.....	22	7	52 eve.
First Quarter...	30	10	10 eve.

Gardener's Work for August—Transplant all kinds of cabbage, cauliflower and celery. Sow carrots and beets, turnips of all kinds, spinach, lettuce, radishes, onions.

VEGETABLES IN SEASON THIS MONTH—Tomatoes, okra, sweet potatoes, Guinea squash, sewee beans, snap beans, corn, beets, cucumbers, cabbage, potatoes, melons.

Plantation Work for August—Now sow full crops of field turnips, carrots, and beets, and such other crops as were omitted last month; strip fodder. Early rice will be fit to cut the last of this month; look to it. This is a good time to plant vines of the first slips, in order to procure seed potatoes for the next year's crop.

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SEPTEMBER.
9th Month begins
MONDAY,
30 Days.

1873.
Sun enters
LIBRA,
Tuesday, 23d.

Astronomical Notes for September.

At 8 P. M. on first of the month Lyra is nearly overhead, Virgo low in the west, Dolphin (Job's Coffin) east of meridian, Sagittarius low down in the south.

DAY OF Month	Week.	Charleston, Geo. & Ala. Sun Rises.	Sun Sets.	Remarkable Events, Aspects, &c.	Sun's Declination. North. ° ′	Moon at Charleston Age at Noon.	Place.	Rises AND Sets.	High Water at Chas'n	Sav'h.
1	M.	5 35	6 24	Napoleon surrendered to	8 10	9 7	♐	morn.	1 47	1 40
2	T.	5 35	6 23	[King of Prussia, 1870.	7 48	10 7	♑	12 20	2 50	2 42
3	W.	5 36	6 21	Fr. Republic proclaimed, '70. ☌ ♄ ☾	7 26	11 7	♑	1 21	4 12	4 1
4	T.	5 37	6 20	1st American Congress, 1774. ☿ in Per-	7 4	12 7	♒	2 33	5 20	5 12
5	Fr.	5 37	6 19	Battery Wagner evacuated,'63. ihelion	6 42	13 7	♒	3 47	6 17	6 11
6	S.	5 38	6 17		6 19	14 7	♓	rises.	7 9	7 2
7	S.	5 38	6 16	*13th Sunday after Trinity.*	5 57	15 7	♓	7 15	7 56	7 48
8	M.	5 39	6 15	Surrender of Laon, 1870.	5 34	16 7	♈	7 49	8 42	8 34
9	T.	5 40	6 13	☌ ☿ ●	5 12	17 7	♈	8 23	9 22	9 17
10	W.	5 40	6 12	Columbus discovered America,	4 49	18 7	♉	8 56	10 6	10 4
11	T.	5 41	6 11	[1492.	4 26	19 7	♉	9 33	10 52	10 54
12	Fr.	5 42	6 9	Battle Boonesville, Mo., 1861.	4 3	20 7	♊	10 16	11 45	11 46
13	S.	5 43	6 8	Wellington died, 1852.	3 40	21 7	♊	11 5	eve.	eve.
14	S.	5 43	6 7	*14th Sunday after Trinity.*	3 17	22 7	♋	11 50	1 51	1 44
15	M.	5 44	6 5	Jackson capt. Harper's Ferry, 1862.	2 54	23 7	♋	morn.	2 50	2 42
16	T.	5 44	6 4		2 31	24 7	♋	12 47	3 56	3 46
17	W.	5 45	6 3	Ember Day. ☌ ♁ ☾	2 8	25 7	♌	1 42	4 55	4 46
18	T.	5 46	6 2	Paris invested by Prussians, 1870.	1 44	26 7	♌	2 41	5 43	5 36
19	Fr.	5 46	6 0	Battle of Chickamauga, 1863. Ember Day.	1 21	27 7	♍	3 40	6 23	6 17
20	S.	5 47	5 59	Ember Day. St. Matthew.	0 58	28 7	♍	4 35	7 1	6 54
21	S.	5 48	5 58	*15th Sunday after Trinity.*	0 34	29 7	♍	sets.	7 35	7 27
22	M.	5 48	5 56	Capitulation of Toul, 1870.	0 11N	1 0	♎	6 38	8 10	8 2
23	T.	5 49	5 55	*A great change; perhaps a storm.*	0 11S	2 0	♎	7 7	8 44	8 36
24	W.	5 50	5 53		0 35	3 0	♏	7 35	9 14	9 9
25	T.	5 50	5 52	Balaklava taken, 1854.	0 58	4 0	♏	8 5	9 54	9 50
26	Fr.	5 51	5 51		1 22	5 0	♏	8 43	10 35	10 35
27	S.	5 52	5 49	Surrender of Strasbourg, 1870.	1 45	6 0	♐	9 24	11 23	11 22
28	S.	5 52	5 48	*16th Sunday after Trinity.*	2 9	7 0	♐	10 14	morn	morn
29	M.	5 53	5 47	St. Mich. and All Angels	2 32	8 0	♑	11 11	12 20	12 19
30	T.	5 54	5 45	☌ ♄ ☾	2 55	9 0	♑	morn.	1 27	1 23

PHASES OF THE MOON FOR SEPTEMBER.

CHARLESTON, S. C.	DAYS.	H.	M.	MONTGOMERY, ALA.	DAYS.	H.	M.	TALLAHASSEE, FLA.	DAYS.	H.	M.
Full Moon.....	6	3	50 eve.	Full Moon.....	6	3	24 eve.	Full Moon.....	6	3	31 eve.
Last Quarter.....	13	10	21 morn.	Last Quarter.....	13	9	55 morn.	Last Quarter...	13	10	2 morn
New Moon.....	21	12	32 eve.	New Moon.....	21	12	6 eve.	New Moon.....	21	12	13 eve.
First Quarter....	29	9	37 morn.	First Quarter...	29	9	11 morn.	First Quarter..	29	9	18 morn.

Gardener's Work for September—Now sow full crops of all kinds—turnips, onions, carrots, beets, cabbages, lettuce, cresses. Look after your mushroom beds. Hoe and thin your turnips.

VEGETABLES IN SEASON THIS MONTH.—Tomatoes, okra, sweet potatoes, Guinea squash, sewee beans, snap beans, corn, beets, cucumbers, cabbage, potatoes, melons.

Plantation Work for September—Continue to sow field turnips, carrots and beets. Southern seed for this sowing is always better than the imported; those from the latter are apt to run to seed early in the spring, unless it be English seed. Prepare lands for sowing rye in October. Pick cotton; harvest corn.

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OCTOBER.
10th Month begins
WEDNESDAY,
31 Days.

1873.
Sun enters
SCORPIO,
Thursday, 23d.

Astronomical Notes for October.

At 8 P. M. on first October Aries rising in east, Persues in northeast, near the horizon, Pegasus east of meridian, Scorpio sinking in southwest.

DAY OF Month	Week	Charleston, Geo. & Ala. Sun Rises.	Sun Sets.	Remarkable Events, Aspects, &c.	Sun's Declination. South. ° ′	Age at Noon.	Moon at Charleston Place.	Rises AND Sets.	High Water at Chas'n	Sav'h.
1	W.	5 54	5 44	Rural Carolinian started, 1869.	3 19	10 0	♒	12 28	2 39	2 31
2	T.	5 55	5 43	*Change, with rain.*	3 42	11 0	♒	1 23	3 52	3 42
3	Fr.	5 56	5 42	Greek fire thrown into Charleston, 1863.	4 5	12 0	♓	2 35	4 59	4 50
4	S.	5 56	5 40	Battle Corinth, 1862.	4 28	13 0	♓	3 46	5 56	5 49
5	**S.**	5 57	5 39	*17th Sunday after Trinity.*	4 51	14 0	♈	4 58	6 43	6 36
6	M.	5 58	5 38	*Fair and cool mornings.*	5 15	15 0	♈	rises.	7 29	7 21
7	T.	5 59	5 36	French repulsed at Metz, '70. ♂ ♆ ☾	5 38	16 0	♉	6 49	8 10	8 4
8	W.	6 0	5 35	Battle Perryville, Ky., 1862.	6 0	17 0	♉	7 25	8 57	8 51
9	T.	6 0	5 34	Battle Santa Rosa Island, 61.	6 23	18 0	♊	8 9	9 42	9 36
10	Fr.	6 1	5 33	*Fair and pleasant.*	6 46	19 0	♊	8 56	10 41	10 41
11	S.	6 2	5 31		7 9	20 0	♊	9 50	11 24	11 25
12	**S.**	6 2	5 30	*18th Sunday after Trinity.*	7 32	21 0	♋	10 48	eve.	eve.
13	M.	6 3	5 29	(12) Gen. R. E. Lee died, '70.	7 54	22 0	♋	11 47	1 24	1 20
14	T.	6 4	5 28	Battle Bristow Station, 1863. ♂ ♁ ☾	8 16	23 0	♌	morn.	2 27	2 19
15	W.	6 5	5 26	*Fair.*	8 38	24 0	♌	12 40	3 28	3 17
16	T.	6 5	5 25	Eng. House Parliam't b't, '34.	9 1	25 0	♌	1 39	4 19	4 8
17	Fr.	6 6	5 24	*More unsettled for*	9 24	26 0	♍	2 30	5 4	4 56
18	S.	6 7	5 23	St. Luke. *the season.*	9 44	27 0	♍	3 28	5 46	5 38
19	**S.**	6 8	5 22	*19th Sunday after Trinity.*	10 6	28 0	♎	4 22	6 23	6 17
20	M.	6 8	5 21	♂ ♆ ●	10 28	29 0	♎	5 16	6 58	6 51
21	T.	6 9	5 20	Battle Leesburg, 1861.	10 49	0 3	♎	sets.	7 35	7 27
22	W.	6 10	5 19	Battle Pocotaligo, 1862. ♂ ☿ ☾	11 11	1 3	♏	6 12	8 7	7 59
23	T.	6 11	5 18		11 32	2 3	♏	6 42	8 48	8 42
24	Fr.	6 11	5 16	*Rain and very changeable.*	11 53	3 3	♐	7 22	9 34	9 28
25	S.	6 12	5 15	Capitulation Schlessstadt, '70.	12 13	4 3	♐	8 8	10 20	10 18
26	**S.**	6 13	5 14	*20th Sunday after Trinity.*	12 34	5 3	♑	9 3	11 11	11 13
27	M.	6 14	5 13	(26) Surrender of Metz, 1870.	12 54	6 3	♑	10 8	morn.	morn.
28	T.	6 15	5 12	St. Simon and St. Jude.	13 14	7 3	♑	11 16	12 11	12 12
29	W.	6 16	5 12		13 34	8 3	♒	morn.	1 18	1 14
30	T.	6 16	5 11	*Now clears pleasant.*	13 54	9 3	♒	12 21	2 26	2 18
31	F.	6 17	5 10		14 14	10 3	♓	1 36	3 33	3 23

PHASES OF THE MOON FOR OCTOBER.

CHARLESTON, S. C.	DAYS.	H.	M.
Full Moon.....	6	12	12 morn.
Last Quarter...	13	1	6 morn.
New Moon	21	5	36 morn.
First Quarter..	28	6	51 eve.

MONTGOMERY, ALA.	DAYS.	H.	M.
Full Moon.....	5	11	46 eve.
Last Quarter...	13	12	40 morn.
New Moon.....	21	5	10 morn.
First Quarter..	28	6	25 eve.

TALLAHASSEE, FLA.	DAYS.	H.	M.
Full Moon.....	5	11	53 eve.
Last Quarter...	13	12	47 morn.
New Moon.....	21	5	17 morn.
First Quarter..	28	6	32 eve.

Gardener's Work for October—You may make two sowings of cabbages this month, and, if of English seed, they will not "run" in the spring. Sow lettuce; hoe turnips and thin; put out leeks and onions; sow principal crop of spinach; earth up celery.

VEGETABLES IN SEASON THIS MONTH—Tomatoes, okra, sweet potatoes, Guinea squash, sewee beans, snap beans, corn, beets, cucumbers, cabbage, potatoes, melons.

Plantation work for October—Continue picking your cotton as it blows. Sow early rye, wheat, barley. Dig your sweet potatoes when the weather becomes cool and you expect frost.

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NOVEMBER.
11th Month begins
SATURDAY,
30 Days.

1873.
Sun enters
SAGITTARIUS,
Saturday, 22d.

Astronomical Notes for November.

At 8 P. M. on the first of the month Foinalhairt (in southern fish) is on the meridian south, Taurus rising in east, Lyra bright in southwest, Andromeda and Persius in northeast.

DAY OF Month	Week.	Charleston, Geo. & Ala. Sun Rises.	Sun Sets.	Remarkable Events, Aspects, &c.	Sun's Declination. South. ° ′	Moon at Charleston Age at Noon.	Place.	Rises. AND Sets.	High Water at Chas'n	Sav'h.
1	S.	6 18	5 9	All Saints' Day.	14 33	11 3	♓	2 38	4 35	4 26
2	**S.**	6 19	5 8	*21st Sunday after Trinity.*	14 52	12 3	♈	3 44	5 27	5 19
3	M.	6 20	5 7	*Cloudy, unsettled.* ♂ ♆ ☾	15 11	13 3	♈	4 54	6 15	6 9
4	T.	6 21	5 6	William III. la'd. in Eng. 1688.	15 29	14 3	♉	rises.	7 3	6 56
5	W.	6 22	5 6	Gunpowder Plot, 1605.	15 48	15 3	♉	6 0	7 51	7 43
6	T.	6 23	5 5	*Fair and frosty.*	16 6	16 3	♊	6 45	8 36	8 28
7	Fr.	6 24	5 4	Grant defeated, 1861.	16 23	17 3	♊	7 36	9 23	9 18
8	S.	6 25	5 3	Trent affair, 1861.	16 41	18 3	♋	8 33	10 13	10 11
9	**S.**	6 26	5 2	*22d Sunday after Trinity.*	16 58	19 3	♋	9 31	11 3	11 5
10	M.	6 26	5 1	(8) Milton died, 1674. ♂ ☉ ☾	17 15	20 3	♌	10 29	11 58	11 59
11	T.	6 27	5 1	(9) Prince of Wales b'n, 1841.	17 32	21 3	♌	11 29	eve.	eve.
12	W.	6 28	5 0		17 48	22 3	♌	morn.	1 49	1 42
13	T.	6 29	5 0	*Now expect a change,*	18 4	23 3	♍	12 24	2 37	2 29
14	Fr.	6 30	4 59	*perhaps a frost.*	18 20	24 3	♍	1 19	3 31	3 21
15	S.	6 31	4 59	☉ stat'y	18 35	25 3	♎	2 14	4 18	4 7
16	**S.**	6 32	4 58	*23d Sunday after Trinity.*	18 50	26 3	♎	3 5	5 1	4 52
17	M.	6 33	4 57	♂ ♀ ☾	19 5	27 3	♎	4 1	5 43	5 36
18	T.	6 34	4 57	Gama rounded Cape Good	19 19	28 3	♏	4 57	6 23	6 17
19	W.	6 35	4 56	[Hope, 1497.	19 33	29 3	♏	sets.	7 6	6 59
20	T.	6 36	4 56	Lord Elgin died, 1863. ☿ stat'y	19 47	0 6	♐	5 26	7 50	7 42
21	Fr.	6 36	4 56		20 0	1 6	♐	6 7	8 36	8 28
22	S.	6 37	4 55	*Fair and Frosty.*	20 13	2 6	♐	7 0	9 20	9 15
23	**S.**	6 38	4 55	*24th Sunday after Trinity.*	20 26	3 6	♑	8 2	10 11	10 9
24	M.	6 39	4 55	(23) Bat. Lookout Mount'n, '63. ♂ ♄ ☾	20 38	4 6	♑	9 7	11 3	11 5
25	T.	6 40	4 54	Bat. Missionary Ridge, 1863.	20 50	5 6	♒	10 13	morn.	morn.
26	W.	6 41	4 54	*Clear and mild.*	21 1	6 6	♒	11 23	12 0	12 1
27	T.	6 42	4 54		21 12	7 6	♓	morn.	1 3	12 59
28	Fr.	6 42	4 54	Battle Pentland, 1666.	21 23	8 6	♓	12 24	2 0	2 7
29	S.	6 43	4 54	(30) St. Andrew.	21 33	9 6	♈	1 35	3 2	2 52
30	**S.**	6 44	4 54	*Advent Sunday.*	21 43	10 6	♈	2 39	3 57	3 47

PHASES OF THE MOON FOR NOVEMBER.

CHARLESTON, S. C.				MONTGOMERY, ALA.				TALLAHASSEE, FLA.			
	DAYS.	H.	M.		DAYS.	H.	M.		DAYS.	H.	M.
Full Moon.....	4	10	29 morn.	Full Moon.....	4	10	3 morn.	Full Moon.....	4	10	10 morn.
Last Quarter...	11	7	29 eve.	Last Quarter...	11	7	3 eve.	Last Quarter...	11	7	10 eve.
New Moon.....	19	10	17 eve.	New Moon.....	19	9	51 eve.	New Moon.....	19	9	58 eve.
First Quarter..	27	2	54 morn.	First Quarter..	27	2	28 morn.	First Quarter..	27	2	35 morn.

Gardener's Work for November—Sow your first crop of peas and a few turnips. Plant out onions raised from seed in August and September. Plant Windsor and long-pod beans. Dress asparagus and artichokes.

VEGETABLES IN SEASON THIS MONTH—Ground artichoke, potato, squash, parsnip, salsify, cabbage, collards, mustard, turnips, carrots.

Plantation Work for November—Sow full crops of rye, barley, wheat, and other small grain. Harvest your sweet potatoes.

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DECEMBER,
12th Month begins
MONDAY,
31 Days.

1873.
Sun enters
CAPRICORNUS
Monday, 22d.

Astronomical Notes for December.

On the first of the month, at 8 P. M., Orion is rising in the east, Taurus and Aries above him; Lyra in N. W.

DAY OF Month	Week.	Charleston, Geo. & Ala. Sun Rises.	Sun Sets.	Remarkable Events, Aspects, &c.	Sun's Declination. South, ° ′	Moon at Charleston Age at Noon.	Place.	Rises AND Sets.	High Water at Chas'n	Sav'h.
1	M.	6 45	4 54	*Coup d'etat* in Paris, 1851.	21 52	11 6	♌	3 45	4 56	4 47
2	T.	6 46	4 54	Barcelona bombarded, '42.	22 1	12 6	♌	4 58	5 59	5 52
3	W.	6 47	4 54	*Fair, with frost.*	22 10	13 6	♋	6 8	6 37	6 30
4	T.	6 47	4 54	Battle Austerlitz, 1805.	22 18	14 6	♋	rises.	7 28	7 20
5	Fr.	6 48	4 54		22 26	15 6	♋	6 19	8 15	8 7
6	S.	6 49	4 54	Mary Queen of Scots born, 1542.	22 33	16 6	♋	7 17	9 2	8 57
7	**S.**	6 50	4 54	*2d Sunday in Advent.*	22 40	17 6	♋	8 22	9 50	9 48
8	M.	6 51	4 55	*Changeable.* ♂ ♁ ☾	22 46	18 6	♌	9 21	10 40	10 40
9	T.	6 52	4 55	*Rainy, perhaps snow.*	22 52	19 6	♌	10 21	11 25	11 27
10	W.	6 52	4 55	Great fire in Charleston, 1861.	22 58	20 6	♍	11 16	eve.	eve.
11	T.	6 53	4 55		23 4	21 6	♍	morn.	1 1	12 57
12	Fr.	6 54	4 55	Battle Fredericksburg, 1862.	23 7	22 6	♍	12 7	1 48	1 41
13	S.	6 54	4 55	Prince Albert died, 1861.	23 11	23 6	♎	1 2	2 32	2 24
14	**S.**	6 55	4 55	*3d Sunday in Advent.*	23 15	24 6	♎	1 57	3 26	3 16
15	M.	6 56	4 56	Battle Nashville, 1864.	23 18	25 6	♏	2 53	4 15	4 4
16	T.	6 56	4 56	Patent office burnt, 1836.	23 20	26 6	♏	3 47	5 2	4 53
17	W.	6 57	4 57	Ember Day. ♂ ♀ ☾	23 23	27 6	♏	4 46	5 53	5 44
18	T.	6 57	4 57	[nance Secession, 1860.	23 24	28 6	♐	5 50	6 39	6 32
19	Fr.	6 58	4 58	South Carolina passed Ordi- Ember Day	23 26	29 6	♐	6 54	7 31	7 23
20	S.	6 59	4 58	Ember Day. St. Thomas.	23 27	0 9	♑	sets.	8 20	8 12
21	**S.**	6 59	4 59	*4th Sunday in Advent.*	23 27	1 9	♑	6 59	9 9	9 3
22	M.	7 0	4 59	*Cold and cloudy.* ☐ ♃ ●	23 27	2 9	♒	8 1	10 0	9 58
23	T.	7 0	5 0	Thackery died, 1863. ☿ ♂ ☾	23 26	3 9	♒	9 20	10 49	10 51
24	W.	7 1	5 0		23 25	4 9	♓	10 22	11 41	11 42
25	T.	7 1	5 1	*Christmas Day.*	23 24	5 9	♓	11 29	morn.	morn.
26	F.	7 2	5 1	St. Stephen's Day.	23 22	6 9	♈	morn.	12 35	12 34
27	S.	7 2	5 2	St. John's Day.	23 19	7 9	♈	12 28	1 28	1 24
28	**S.**	7 2	5 2		23 16	8 9	♉	1 36	2 28	2 20
29	M.	7 2	5 2	*1st Sunday after Christmas.*	23 13	9 9	♉	2 41	3 31	3 21
30	T.	7 3	5 3	*Ends fair.*	23 9	10 9	♉	3 47	4 33	4 23
31	W.	7 3	5 3	Forts east of Paris shelled, '70.	23 4	11 9	♊	4 53	5 29	5 24

PHASES OF THE MOON FOR DECEMBER.

CHARLESTON, S. C.	DAYS.	H.	M.		MONTGOMERY, ALA.	DAYS.	H.	M.		TALLAHASSEE, FLA.	DAYS.	H.	M.	
Full Moon.....	3	11	1	eve.	Full Moon.....	3	10	35	eve.	Full Moon.....	3	10	42	eve.
Last Quarter...	11	4	35	eve.	Last Quarter....	11	4	9	eve.	Last Quarter...	11	4	16	eve.
New Moon.....	19	1	30	eve.	New Moon.....	19	1	4	eve.	New Moon.....	19	1	11	eve.
First Quarter.	26	10	45	morn.	First Quarter...	26	10	19	morn.	First Quarter..	26	10	26	morn

Gardener's Work for December—Plant peas of all kinds; set out onions, garlic, and eschalots and cabbages. Sow a few lettuce, spinach, carrots and radishes. You may try a few Irish potatoes.

VEGETABLES IN SEASON THIS MONTH—Ground artichoke, leeks, turnips, cabbage, collards, mustard, spinach, parsnips, carrots, salsify.

Plantation Work for December—Finish picking cotton; get out your crops of rice, and prepare for market. Commence ploughing, ditching, draining and manuring as early as possible for the next year's crop.

TO THE PLANTERS AND FARMERS OF THE SOUTH:

The decrease of labor and its consequent increased cost, which consumes so great a portion of the profit of the farmer, should stimulate him to accomplish, by improved cultivation and heavy manuring, the largest yield on the same extent of ground. To accomplish this, it is well to remember that complete drainage is the first requisite. Our farmers should use the most improved implements, and cultivate their land more judiciously, thoroughly preparing it for the crop which is to occupy it. Much loss has, heretofore, resulted from excess of cultivation after the crop has been well grown, the lateral roots being cut and the plant, consequently, checked materially in its growth and production. If the deep culture is done before the crop is up, and, indeed, before the seed is planted, ample provision is made for drainage, and the roots have a more extended range. Shallow culture is all that is then necessary to keep the plants free from grass, and break the crust of the earth, so that the fertilizing particles from the rain and dew may easily reach their roots. When underdraining can be cheaply accomplished, we would advise our planting friends to try it upon a small scale, and note the difference between its yield and that of the adjoining field. Lands which are well drained require less manure, and are always less liable to be infested with hurtful weeds.

The poor pine lands of our State, so long neglected, and even now considered almost worthless, are, in our experience, capable of high culture, and can, with judicious treatment vie with our richest bottom lands, producing in a series of years a more profitable return, because more certain and more easily managed. The combination of compost, whether of stable manure, or, what is better, stable manure and leaf mould, with the commercial fertilizers, will be found of infinite service in the treatment of their sandy soils. The impression which the experience of many and good planters has left upon our mind, is that the compost should be scattered and ploughed in, and that the concentrated manure should be applied in the drill and bedded upon, thus bringing the roots directly in contact with the manure. We should be pleased if our planters would note the results of the application of different manures upon different soils, and also the advantages resulting from improved culture. We need to learn much, and our friends should study the science of agriculture as closely as any other profession.

We hope the day is not far distant when the loss of labor will be more than compensated by improved culture, and high manuring. Our fertilizer has been very extensively used, and has been made with great care, and with a view to use upon the poor lands of our State, and, as will be noted in many of the certificates which we present, with unvarying success. It has for its base the celebrated South Carolina Phosphate, which, when ammoniated, rendered soluble, and combined with alkaline salts, is a concentrated and complete mixture. It is generally conceded that it sustains the plant more effectually against drought, and matures the crop earlier than any other manure. Using the best material, and with the most thorough preparation, we challenge comparison with any fertilizer of established reputation. We beg to refer to the certificates annexed from planters of experience and character as to its results upon their crops.

DIRECTIONS FOR THE USE OF THE WANDO FERTILIZER.

COTTON.

From 200 to 250 pounds per acre—on the list—bedded or in drill with the seed.

CORN.

From 250 to 300 pounds per acre, 150 to 200 pounds in the hill at the time of planting, and the balance when the crop is 2½ to 3 feet high.

WHEAT.

Prepare the ground by deep ploughing and harrowing. Apply, broadcast with the seed, about 200 pounds to the acre, and in the spring from 100 to 200 pounds as a top dressing. This will ensure a large yield.

POTATOES.

Apply the quantity designed for an acre in the drill; 250 pounds has usually given an increase of four to one.

VEGETABLES.

Compost always with stable manure or leaf mould 300 to 400 pounds per acre, in the drill and under the seed.

DIRECTIONS FOR USING THE WANDO ACID PHOSPHATE.

Take a given weight of cotton seed, wet it well, and mix it with an equal weight of the Wando Acid Phosphate; repeat the operation with the same quantity until you use all of your Acid Phosphate, packing it into a heap.

Allow it to remain as long a time as possible, say at least four or five weeks, protecting it from the rain.

Apply at the rate of 400 or 500 pounds to the acre.

The Wando Acid Phosphate is offered to the planters at $30 cash, or $35 on time, per ton of 2,000 pounds, payable 1st November, 1873.

WM. C. DUKES & CO., General Agents.

NEWNAN, GA., September 16th, 1872.

We used one ton Wando, this year, on cotton and are much pleased with it. We have used many kinds and it is as good as any, and has paid us a good percentage.

W. H. & W. G. CAMP, and
NOAH SIMPSON.

SPARTANBURG, S. C., September 8th, 1872.

With much pleasure I give you my experience with Wando this year on corn. I took eight acres—old field late in April—did not break up, just threw three furrows together, crossed with a turner and run a subsoil after.

I then dropped a tablespoonful of Wando in each check, the corn directly on same, and covered with ordinary shovel—two furrows—in due time

boarded off, but got a bad stand; where the soil was light the stand was better. The corn grew off much better than my other corn. In due time broke middles and ploughed twice afterwards, using a twenty inch sweep in the middles each time. This corn stood a nine week's drought much better than my other corn, and fully met my expectation in earing. I used 500 pounds of Wando, or $15 worth, in eight acres. I have no doubt its use has increased the crop 40 bushels or more.

My cotton land was mostly run out with one-horse turn-over ploughs, then subsoiled with bull tongues. I applied, as near as possible, 200 pounds of Wando per acre, and ridged with turning plough—then run out middles with sweeps and planted from 20th to last April. Stand bad owing to drought. I used four different kinds of manures.

Your Wando has excelled them all throughout the drought and since.

My experience with your Wando on cotton and corn is quite a success, and have no doubt would be the same on other crops. No other fertilizer has paid me so well as your Wando. It is at least two weeks ahead of my other manures—in maturing. Some of my lands, on which I used your Wando, will yield 1,000 to 1,200 pounds seed cotton to the acre—even here, five miles north of Spartanburg C. H. E. M. COOPER.

ASHEVILLE, N. C., October 19th, 1872.

I used five bags Wando on ten acres of sandy bottom lands on Swannanoa, which, previously, from being unmanured and badly cultivated had not reached an average yield of over eight bushels per acre. Broke it up thoroughly in the Spring late with a two-horse plough and harrowed it well. Dropped the corn and the Wando upon it in checks 3x4; it grew off finely; catching up with other corn planted in the neighborhood some time before it, and preserved its freshness throughout the season.

The yield was 30 bushels per acre. I like it very well, and have used it on five acres of wheat just planted. W. R. YOUNG.

MILLWAY, S. C., October 21st, 1872.

I used two tons of Wando on my cotton this year, and am so well pleased with it that I will use it on my entire crop next year. B. F. DAY.

DURHAM, N. C., September 5th, 1872.

The Wando I used has proved a success. I think the yield on cotton will be 40 per cent. more than where I used none, and on corn about 25 per cent.

I applied 200 pounds per acre, in the bottom of my cotton ridges, and to corn at the second ploughing. J. A. J. BARBEE.

LAURENS, S. C., October 17th, 1872.

I have been using fertilizers for four years, viz., Wilcox & Gibbs, Carolina, Mapes' and Wando, and prefer the Wando to any.

It will stand more dry weather than any I have used or seen used. It paid me well this year and I will use it again. C. E. BROOKS.

RIEDVILLE, S. C., October 20th, 1872.

I used 200 pounds per acre and am satisfied my crop has been doubled by its use. MILES FLOYD.

WINNSBORO', S. C., October 18th, 1872.

I consider the "Wando" as one of the best fertilizers in use. I used two other kinds this year and have noticed very carefully the results. We had so much rain early in the summer that our cotton went too much to weed, and the rainy spell was followed by a very severe drought, which actually killed the cotton in some parts of the field, and here I noticed that the portion manured by the Wando kept greener and retained more fruit than any other. I have used several kinds of fertilizers but think the Wando stands at the head of the list.

I will be sure to use your Wando next year. S. W. JACKSON.

PHŒNIX, S. C., October 23d, 1872.

I am well pleased with your Wando and prefer it to any other manure I have ever used, and intend to use it again. E. A. RODGERS.

POWER'S SHOP, October 23d, 1872.

I used your Wando on cotton at rate 150 pounds per acre, and on corn at rate 100 pounds per acre, and it paid me at least 100 per cent., and would have done much better but for the drought. It surpassed any fertilizer I have ever used and I will continue its use. J. E. CHILDRESS.

MACON COUNTY, GA., September 14th, 1872.

I used the Wando this year, and also Patapsco and Chappell's, and can pronounce it fully equal to either. H. M. KAIGLER.

BUTLER, TAYLOR CO., GA., September 12th, 1872.

I used Wando this year by the side of two other kinds of standard Guanos, and think it equal to any. E. GANOTT.

UNION POINT, GA., September 20th, 1872.

I used the Wando in my garden, and under corn and cotton with entire satisfaction. Am satisfied it has doubled the amount of fruit on my cotton as I left a few rows unmanured to test it. My land is red soil.

W. H. SIMPSON.

UNION POINT, GA., September 17th, 1872.

I used 75 pounds Wando, per acre, on cotton, and left three rows in middle of field unmanured. At first picking I obtained three pounds from unfertilized rows, and eighteen pounds from the three rows—next. I am satisfied the yield will be double that of natural soil. C. C. BOWDEN.

CANOOCHEE, GA., October 15th, 1872.

I have used the Wando for the past two seasons, and am well pleased with the results.

I have used various brands since the war and the Wando compares favorably with the best of them and costs less money. JAMES ROUNTREE.

TIMMONSVILLE, S. C., October 15th, 1872.

I used the Wando this year and made with it two bales of cotton, where I would have made only one without it, and I am much pleased with the result.

ISAAC RAFRA.

TIMMONSVILLE, S. C., October 15th, 1872.

I have used the Wando for the past two years and find it compares favorably with other kinds used. R. D. F. ROLLINS.

MANVILLE, S. C., October 15th, 1872.

I got a late stand of cotton this season, and the dry hot weather the last of July came on it before it was matured, notwithstanding I have made a fair crop. My prospect at the time of the drought was *very flattering*.

My experience with the Wando this year is equally satisfactory as it has been for the past three years, and I design to continue the use of it.

H. E. L. PEEBLES.

ST. MATHEWS, October 22d, 1872.

I used four kinds of fertilizers this year and like the Wando as well as any. I used the fertilizer in connection with cotton seed and domestic manure and the yield was fully up to my expectations.

I believe the only way to make the farm pay is to feed the land, and by all means save cash enough to buy an abundance of commercial fertilizers to mix with home made manures. W. J. SNIDER.

MORVEN, ANSON CO., N. C., October 21st, 1872.

I used Wando at rate 200 pounds per acre on cotton, and though the seasons were unfavorable, shall make one-third more than if I had used no Wando. I will use again the coming year. D. P. JOHNSON.

ASHEVILLE, N. C., October 18th, 1872.

I used the Wando, 200 pounds on three acres of poor red clay land, under corn. Where the Wando was used I made thirty bushels good corn per acre and on the same kind of land, without it, not more than five bushels.

JOHN G. LINDSEY.

BRONSENVILLE, GA., October 19th, 1872.

I think the Wando a *good Guano*. M. S. BRONSEN.

NEW MARKET, S. C., October 21st, 1872.

I used 200 pounds Wando per acre on cotton, and am satisfied it paid me 100 per cent. W. S. SHADRICK.

POMARIA, S. C., October 16th, 1872.

I used your Wando on cotton and corn, and on cotton the increase was fully one-third, and on corn at least 100 per cent. I prefer it to any other fertilizer. R. E. LEMON.

SUMTER, October 29th, 1872.

I used a small quantity on cotton this year with entire satisfaction. It gave the plant an early start, and forced it forward to early maturity, giving it a satisfactory and largely increasing yield, and comparing favorably with any fertilizer I have used. J. H. EARLE.

BUENA VISTA, S. C., October 11th, 1872.

I used your Wando in an old field taken in and manured two years with domestic manure and a small sprinkling of Wando on the top. Last year I made a bale of 500 pounds to the acre. This year I used Wando alone, and will make 600 pounds lint cotton per acre.

This up-country is destined by the use of fertilizers to be the garden spot of the State, for cotton raising. GEO. W. LESTER.

POMARIA, S. C., October 12th, 1872.

I have used your Wando several years in conjunction with several other kinds and have no scruples in saying it is as good as any, and I will continue its use as long as it proves as good as it does. S. J. WOOD.

TIMMONSVILLE, S. C., October 20th, 1872.

I used your Wando at rate of 200 pounds per acre on cotton, with marked success. It made the cotton grow off finely and keep green bearing till frost, and yielding double the unmanured soil. Some of my neighbors speak very highly of it for corn.

I can recommend it as a valuable fertilizer. JOSEPH C. MIMS.

CHERAW, S. C., October 16th, 1872.

I used the Wando on cotton at rate of 200 pounds per acre, on light sandy and poor land—that is used as an apple and peach orchard—having a goodly number of trees on it. About two-thirds of land was manured last year with barn-yard manure and the balance this year with same. The fertilizer was put in the centre furrow and bedded upon. Cotton planted April 20th, and in consequence of dry weather came up very irregularly and eventually had a bad stand. The land without improvement would not have made 300 lbs. seed cotton per acre, and up to this time I have gathered 700 pounds, and still some to gather. The cotton had no rust, a disease almost general in this section. GEO. W. SPENCER.

SANDY RUN, S. C., October 16th, 1872.

I have used your Wando for the two past years and am well pleased with it. Last year I made 400 lbs. of lint cotton to two acres, but this year, owing to the unpropitious seasons, it did not do as well. I am so well pleased with it that I shall use it on all my crops another year.

LEWIS W. RAST.

WILLIAMSTON, S. C., October 12th, 1872.

I used 130 lbs. Wando per acre on cotton, and the yield is doubled by its use. Also, 200 lbs. on turnips; they are doing finely.

Gentlemen, work on for agriculturists; they are the corner stone, base and main pillars of society, and will reward you in *heart* and with the *purse*.

ALLEN W. CLEMENTS.

LYNCHBURG, S. C., October 13th, 1872.

I am better pleased with your Wando this year than I have been heretofore. I can safely say that it has paid me a better percentage than any other fertilizer I have used. It does not compare so well on my corn, but on cotton excels all others.

HOSEA WILSON.

MADISON, GA., September 17th, 1872.

I used your Wando on good fresh second year land, and the crop was increased fully 50 per cent. by its use.

T. W. HALL.

SPRING HILL, SUMTER CO., October 20, 1872.

I used your Wando at rate of 200 lbs. per acre on light sandy lands, under cotton, and increased the yield from 200 lbs. per acre to 500. I think it a *good* fertilizer, and shall use it again.

JOHN SHIVER, SR.

CARTERSVILLE, S. C., October 23d, 1872.

The Wando has paid me this year 100 per cent. profit notwithstanding the season being unfavorable; the drought in June injuring the entire crop. I used the same quantity this year, and on the same land that I did last year, and gathered 100 lbs. seed cotton more this than last year, showing the beneficial effects of the Wando to the soil. I used 75 lbs. per acre on corn, and it has given entire satisfaction, therefore I am bound to recommend it as a good fertilizer to farmers in general. I expect to use it again.

J. A. ROSE.

MAYESVILLE, S. C., October 12th, 1872.

I used your Wando to a limited extent this year, and am well pleased with its effects.

M. P. MAYES, SR.

ORANGEBURG, S. C., October 9th, 1872.

I used Wando at rate of 200 lbs. per acre on cotton and corn, on common clay land, and the yield is about double that of natural soil.

J. W. H. DUKES.

MILLWAY, S. C., October 26th, 1872.

I used the Wando this year with satisfactory results. I applied 150 lbs. per acre under cotton on thin sandy land, which previously produced 200 lbs. seed cotton per acre, and the yield has increased to 600 lbs., spite of the disastrous influence of two protracted droughts. With ordinary seasons the yield would have been 800 lbs. I shall use it more extensively another year, under corn as well as cotton.

H. R. RUSSEL.

BARNESVILLE, GA., October 29th, 1872.

I used your Wando with very satisfactory results. I used Sea Fowl and Soluble Pacific in the same field, and think it better than either of them. I will average one bale cotton to the acre.

J. P. McCLURE.

HERNDON, GA., October 16, 1872.

I have used your Wando two years and am well pleased with it. In 1870 I applied 200 lbs. to the acre, and gathered 250 lbs. lint cotton from each acre, while unmanured soil yielded only 100 lbs. In 1872 I used 175 lbs. per acre, and the yield was 250 lbs. lint cotton per acre to 100 lbs. on unmanured soil. I prepared my land too late, or would have made 300 lbs. lint cotton per acre.

JAMES SKINNER.

ORANGEBURG, October 28th, 1872.

The Wando Fertilizer is as good as any I have ever used, and I can cheerfully recommend it.

WM. H. REEDE.

CANOOCHEE, GA., October 21st, 1872.

I used your Wando this and last year on cotton and corn, on old and fresh land, and it met all my expectations, and paid me at least double. I believe it has paid me as well as any I have ever used, and that it is the best and cheapest fertilizer in the market.

E. J. DURDIN.

SUMTER, S. C., October 22, 1872.

I have used the Wando for several years with beneficial results. This year have derived more profit than ever before. One hundred pounds per acre applied to corn produced as much as land manured with cotton seed at rate of twenty bushels per acre. In cotton it has paid me 100 per cent. I have had neither rust nor worms.

On an adjoining plantation (that I visited frequently, and where your Wando was extensively used) there was a field of cotton manured heavily with Wando, with the exception of a strip in the centre of five acres, that was left without fertilizer. The field was planted the 9th of May, and the cotton was all in a very luxuriant state, when attacked by worms. By the 1st September not a leaf could he found on the unmanured cotton, while the manured escaped entirely 'till the 8th October, a few days before frost, when they were found scattered in one or two places. Several hundred tons of Wando have been sold in this county the past year, and all that I have heard speak of it, have expressed satisfaction with the results produced from its use. JOHN O. HERIOT.

BETHANY, S. C., October 24th, 1872.

I have used your Wando for two years with perfect satisfaction both to myself and my manager Mr. E. G. Almond, and can safely say it is one of the best fertilizers I have ever used for cotton, corn, melons, &c. I was picking cotton by the 1st of August, and the yield was fully three for one, picking 900 pounds seed cotton per acre, where unmanured land only yielded 300 pounds. The land used was an old field that had been thrown away. On corn the yield is fully double, and the effect of Wando can be plainly seen the second year after application. GARNETT W. ANDREWS.

DOKO, S. C., October 23d, 1872.

I have used the Wando since it was first offered for sale, and have been so well pleased with its results I have never felt disposed to give it up for any other. JOSEPH QUATTLEBAUM.

PINE GROVE, SUMTER CO., October 20th, 1872.

I used three tons of Wando this year and notwithstanding the severest drought experienced for forty years, it has done remarkably well. It has doubled the yield wherever I have tried it, whether on sandy ridges, stiff lands or old poor common lands. I find it the best fertilizer I have ever used and will use no other as long as I can get it. T. D. FOXWORTH.

FOUNTAIN'S INN, S. C., October 22d, 1872.

I used this year, for experiment, four different kinds of the popular fertilizers, and have found the Wando far superior to all. I shall use no other fertilizer in the future and gladly recommend it to the public.

N. CANNON.

ATHENS, GA., November 1st, 1872.

The Wando gave me great satisfaction notwithstanding the severe drought. SANDERS WILLIAMS.

ANDERSON, October 16th, 1872.

I used about 200 pounds Wando per acre on an old poor upland field of corn, within the corporate limits of this town, which without fertilizers would not produce over 3 to 5 bushels per acre, and though my crop was cut somewhat short by the dry weather, I am sure I will make from 8 to 15 bushels per acre. I also used Wando on 4 acres of cotton, the land being quite as poor, at rate 200 pounds per acre, and will make 3 bales of over 400 pounds each. I regard the Wando as one of the best fertilizers made. I have farmed for thirty years and have never yet used any kind of manure to compare with it. It is just the fertilizer for our soil and climate. In future I shall use the Wando as long as I can get it. T. J. ROBERTS.

REIDVILLE, S. C., October 15th, 1872.

I used your Wando this year. I am well pleased with it. I am satisfied the yield is more than doule that of unmanured soil.

Below is a statement of pickings between :

Unmanured—1st picking, ¾ lbs. ; 2d do., 2 lbs.; 3d do., 8 lbs.—total, 10¾ lbs.

Manured at rate 150 lbs. per acre—1st picking, 6 lbs.; 2d do., 10; 3d do. 25—total, 41 lbs.

Manured at rate 300 lbs. per acre—1st picking, 9¾; 2d do., 17½; 3d do., 31—total, 58¼ lbs. JEFFREY C. SHEALDS.

THOMASVILLE, GA., October 19th, 1872.

I used your Wando this year by the side of Zell's Phosphate and find no difference in results. Zell's Phosphate has proved itself, to my satisfaction, to be the best in use heretofore, but I prefer the Wando as it is cheaper.

R. S. BURCH.

GIBSON, GLASCOCK CO., GA., October 22d, 1872.

The Wando did well with me—yielding double the amount of cotton the natural soil did. I planted corn this year where I used Wando under cotton last year, and the good effect is plainly visible. ALLEN MOAT.

WINNSBORO, S. C., October 15th, 1872.

While I have never used anything but Wando I have, by a close observation of the use of other fertilizers, satisfied myself that it is fully equal to the best, and superior to many of them. I have used from 4 to 12 tons of Wando a year for the past four years, and am so entirely pleased with it that I have no disposition to change it for any other. JOEL A. SMITH.

MADISON, GA., October 4th, 1872.

This is to certify that I have used the Wando the present season by the side of three other first class fertilizers, and that I consider it fully equal to any used by me.

C. M. FURLOW.

WASHINGTON, GA., October 21st, 1872.

I used 1 ton Wando this year and am so well pleased that I shall use a much larger quantity next year. I have used other fertilizers and think yours as good as any I have ever used. WILLIAM HOUSE.

LYNCHBURG, S. C., August 30, 1872.

I have used the "Wando" under cotton for the past two seasons and expect to continue using it. The yield is double that of the natural soil.

W. D. HINDS.

TURKEY CREEK, CARROLL CO., GA., Sept. 10, 1872.

I have used the "Wando" for two years. In 1871 I used 100 lbs. per acre, on cotton, and am convinced the yield was double that of the natural soil; and in 1872 I planted corn on the same ground, and the yield will be more than double that of any previous year.

This year I used the Wando on cotton, corn and watermelons with a success far beyond my most sanguine expectations. I am satisfied that with good management "The Wando" will increase the yield of corn or cotton 100 per cent. T. E. HOLMES.

MERRIWEATHER CO., GA., Sept. 10th, 1872.

I used the Wando this year on cotton and corn, with marked success. On cotton I applied 200 lbs. per acre, and on corn about 50 lbs.; and am well pleased with the results, having at least doubled my yield.

JOHN WOOD.

DURHAM, N. C., Sept. 6th, 1872.

The Wando I used last spring I applied at the rate of 200 lbs. per acre on cotton, and am satisfied the gain was 100 per cent.

JEFFERSON GREEN.

WINNSBORO', S. C., October 16, 1872.

After using seven different kinds of fertilizers in the past five years, I believe, all things considered, the Wando to be ahead of all; and it has one remarkably good quality—standing more dry weather than any other fertilizer—which, with our uncertain seasons, is worth a great deal.

W. F. JACKSON.

RIDGE, S. C., October 10, 1872.

I used 200 lbs. Wando per acre on cotton, and have picked from two acres 2520 lbs. of seed cotton, and will get 300 lbs. more, notwithstanding that the caterpillars and boll worms are eating all the small bolls and doing considerable damage. R. B. WATSON.

DURHAM, N. C., September 7, 1872.

I used "Wando" on cotton at the rate of 200 lbs. per acre, and am well pleased with it. The result, I think, will be from 45 to 100 per cent. increase. I will use it again if I can get it.

F. M. PROCTOR.

THOMASVILLE, GA., September 6, 1872.

I used Wando at the rate of 200 lbs. per acre, and Sea Fowl at the rate of 175 lbs. per acre. I have picked, packed and sold from three acres manured by Wando cotton to the amount of $110, and from six acres manured by Sea Fowl to the amount of $100. The three acres manured by Wando bringing as much as six manured by Sea Fowl, the land being the same and worked alike. That manured with Sea Fowl has been dead with rust for four weeks, and that with Wando was alive and flourishing a week since, when the caterpillars cut off the foliage. I have used several kinds before, but like the Wando best, and will want five or six tons next year.

B. S. ANSLEY.

MIDVILLE, GA., October 13, 1872.

I am satisfied with your Wando, and know it has doubled my cotton crop, although the season was not one to give it a fair trial. Suffice to say, I am going to use it next season.

A. G. INMAN.

WILLIAMSTON, S. C., October 14, 1872.

I have used your Wando for the last three years as a cotton fertilizer, and shall continue its use as long as it maintains its present standard.

Since I have been using it, it has never failed to return a handsome profit in the first crop, in addition to the benefit derived by succeeding crops.

J. D. CHARLES.

CLEAR SPRINGS, S. C., October 25, 1872.

I have used the Wando for the past four years very largely on cotton, and have also used various other kinds of fertilizers—Atlantic, Carribean Sea, Stono and Mapes. The Wando I am satisfied with; it has paid me better than any other kind that I have ever used, and I shall use largely of it again.

W. T. LONG.

MORELLA, GA., August 15, 1872.

Last spring I bought 16½ tons Wando, and my regret is that I did not use more.

I used it on both cotton and corn with entire satisfaction. Side by side with unfertilized land, it will yield from 200 to 400 per cent. more. I also used it on my last wheat crop with very satisfactory results.

J. F. BURKHALTER.

MONROE, GA., September 10, 1872.

I used the "Wando" on my farm this year, and I hereby certify that it has not only proved satisfactory, but has exceeded my most sanguine expectations. I invested $250 in the Wando, and am confident that, with cotton at 15 cents, the increase in the value of my cotton crop will be at least $1,000.

LANCELOT BRASWELL.

GROVE STATION, S. C., September 26, 1872.

I applied 130 lbs. Wando per acre on cotton about the last of March, with one of W. J. West's distributors. I can see considerable benefit from the same.

I have used both Mapes' and Peruvian Guano in previous years, and like the Wando so well that I don't use any other now.

I left some soil unmanured with Wando, and the yield in favor of Wando is fully 50 per cent. better.

J. T. WEST.

SUMTER, S. C., October 19, 1872.

I have used your fertilizer exclusively this year, and find it an excellent manure.

I used it on corn, cotton, peas, rice and potatoes, and found the Wando this year even better than heretofore, and if you continue the standard of this year you will sell all that you can make.

This year has been remarkably unfavorable in my neighborhood for all crops, drought prevailing, with a short intermission in July, from the 10th of March. If it had not been for the Wando, I think I would not have made expenses in cotton.

W. J. PRINGLE.

POMARIA, S. C., October 21, 1872.

I have used your Wando for the past three or four years, and consider it the best fertilizer I ever used. In fact, can't make cotton without its help.

ANDREW SHIRLEY.

LEXINGTON CO., S. C., October 24, 1872.

I have used the Wando with marked success on cotton at the rate of 150 lbs. per acre on old land, and about 100 lbs. per acre on fresh land. On the fresh land the yield was better than on the old.

I made five bales of cotton with Wando, where I would only have made three without. I am satisfied that one hundred dollars worth of Wando made me five hundred and fifty dollars worth of cotton more than the unmanured soil would have yielded, the price of cotton being 18 cents per lb.

D. NUNAMAKER.

POMARIA, S. C., October 29, 1872.

I used Wando at the rate of 100 lbs. per acre, side by side with Peruvian Guano, and can see no difference. I am satisfied it is a good manure, and it shows its effects from previous years' application.

G. F. LITZSEY.

GIBSON, GA., October 19, 1872.

I used Wando at the rate of 130 lbs. per acre on cotton, with satisfactory results, and am satisfied that it paid me fully 200 per cent. It is a first class fertilizer, and I expect to use it in the future.

L. T. HARDEN.

BARNESVILLE, GA., October 12, 1872.

I used your Wando on corn this year, using 1000 lbs. on six acres. It paid me at least three for one.

W. D. ADAMS.

CANOOCHEE, GA., October 18, 1872.

I have used the Wando on corn, cotton, rye and turnips, and am fully satisfied with it, and think it a good manure. I have never seen any other fertilizer I would rather have, and will continue its use as long as it is up to its present standard.

JOHN OVERSTREET.

MILLWAY, S. C., October 26, 1872.

I have used your Wando for two years, and regard it as a first class fertilizer. Have used other South Carolina fertilizers, but regard the "Wando" as the best. The good effects from the use of the Wando can be seen for two or more years.

SAMUEL B. COOK.

WARRENTON, GA., October 21, 1872.

I consider the "Wando" second to none. I have tried several kinds, and prefer it to any I have ever used, and expect to use it hereafter.

J. L. JOHNSON.

DOKO, S. C., Nov. 1st, 1872.

I used your Wando for five years, and still give it the preference over all other fertilizers for cotton. I expect to use it again next year.

W. E. McNULTY.

ORANGEBURG, S. C., Oct. 29th, 1872.

I used your Wando at rate of 125 lbs. per acre, and feel satisfied that it has doubled the yield. I am well pleased with it.

JNO. C. KENNEDY.

HERNDON, GA., Nov. 2, 1872.

I have used the Wando and am well pleased with it, and expect to use it again next year, as it is better than any I have ever used.

My neighbors also expect to use it.

JNO. A. SPENCE.

GRIFFIN, GA., October 29th, 1872.

I used the Wando at rate 200 pounds per acre, on land that would not have made over 200 pounds seed cotton per acre, and at rate 100 pounds on land that would not yield over 350 pounds seed cotton per acre, and the yield on each was 500 pounds per acre.

I used the Wando last year by the side of Wilcox, Gibbs & Co.'s Manipulated Guano, about 100 pounds per acre of each, and the Wando was the best.

JOEL AYCOCK.

SUNSHINE, UNION CO., S. C., November 1st, 1872.

I have used the Wando with much satisfaction, it has paid me a good per cent. increase.

I wish to increase my orders for it next year five-fold. We can't do without it.

We are able by its early maturity to close up the crop gathering previous to cold weather. The season for cultivation is also shortened very much by its pressing the crop forward early and keeping it all the while in a most prosperous condition.

Three hundred pounds Wando per acre, pays much better than 200.

S. S. WALKER.

RIDGEWAY, S. C., November 5th, 1872.

For five years in succession I have used the Wando. In the meantime, probably every other kind advertised; some to my benefit, others to my serious injury. I have experimented year after year, row by row, with everything people call a fertilizer.

I have watched the old Wando side by side with others new to the public; sometimes I would think it a little behind; sometimes a little ahead, &c.

It is certainly a *good* manure, and while I think there are other excellent manures, I must say (because I have watched it closely) that during the terrible drought of the past summer the Wando rows were green, while the rows manured with other fertilizers were burnt up.

H. EDMUNDS.

FLAT SHOALS, GA., November 1st, 1872.

I take pleasure in testifying to the efficacy of the Wando Fertilizer, being the first year I have used it. I am much pleased with its results.

I expect to use it more extensively another year.

J. C. DELAPERRIERE, M. D.

WILLIAMSTON, S. C., October 21, 1872.

I used your Wando by the side of Mapes' Phosphate. I never saw cotton grow faster nor look finer than where I used the Wando. I am well pleased with the Wando.

J. B. RODGERS.

POMARIA, S. C., October 20th, 1872.

The Wando is as good a fertilizer as I have ever used, and equals many higher priced fertilizers that I have used by its side. DAVID SUBER.

GREENVILLE, S. C., October 23d, 1872.

I used three tons Wando this year on cotton, applied at rate of 100 to 150 lbs. per acre, and the yield was doubled, notwithstanding the bad seasons. I also used Carribean Sea Guano at rate of 200 lbs. per acre, and the Wando at 100 lbs. per acre was ahead. I think the Wando is the best fertilizer I have ever used. A. B. MONTGOMERY.

MANNING, S. C., October 28th, 1872.

I am confident that the Wando I used this season, at rate of 200 lbs. per acre, caused my cotton to more than double the yield of natural soil, with a saving of one working. One of my brothers used the Wando this year on land that had been manured with Wando last year, and the increase of fruit was much greater. We will be glad to use more next year.

JAS. F. STRANGE.

BLACKVILLE, S. C., October 24th, 1872.

Messrs. W. C. Dukes & Co.:

I used the Wando at the rate of 155 to 160 pounds per acre, and find the difference in the yield in favor of the Wando 462 pounds seed cotton per acre above the natural soil. The land experimented upon has been rested for three years, and consequently covered with weeds, &c.

Yours, respectfully,

J. F. COOPER.

EDGEFIELD, S. C., November 1st, 1872.

I used a few tons of your Wando the past season under cotton, and am so perfectly pleased with the result that I never shall plant another cotton seed without the Wando. Very truly, yours,

JAS. L. DOW.

ROCKY WELL, S. C., November 8th, 1872.

I prefer the Wando to any fertilizer I have ever used. Notwithstanding this very unfavorable season, the yield of my crop is at least 100 per cent. better. I expect to use your fertilizer on my next crop.

Respectfully yours,

G. A. KAMINER.

BLACKVILLE, S. C., October 24th, 1872.

Messrs. W. C. Dukes & Co.:

I used the Wando this season against compost, at the rate of one hundred (100) pounds per acre, and, find up to date the yield in favor of the Wando is two hundred and sixteen (216) pounds seed cotton.

Yours, respectfully, J. F. WILLIAMS.

COLUMBIA, S. C., November 5th, 1872.

I used three tons of your Wando the past season, and think it increased my crop one quarter, (¼,) and would not exchange it for any other Fertilizer made, and will use more the next season. J. BURNSIDE.

ANDERSON, S. C., November 12th, 1872.

I have used the Wando Fertilizer on my cotton for the last two years, and find it to be the best Fertilizer that I have used, and expect to use it again.

A. HARRIS.

WRIGHT'S BLUFF, S. C., November 11th, 1872.

I am very much pleased with the Wando. The past season was very dry, but I think it doubled the yield of my cotton. E. R. RICHBOURG.

ANDERSON, S. C., November 11th, 1872.

We used the Wando at the rate of 100 lbs. per acre, and think it doubled the yield, and will try it again next year, as we think it a first-class Fertilizer. JOHN O. & G. W. HAWKINS.

WARRENTON, GA., November 2d, 1872.

I used one ton of the Wando the past season, and I think it paid me at the least calculation 33 per cent. I used 150 lbs. to the acre.

RICHARD NORRIS.

POMARIA, S. C., November 1st, 1872.

I used this year 150 lbs. Wando per acre; I will make six bales of cotton from the nine acres I planted, which is old field land; some of it has been under cultivation for eighty years; and for corn, 75 lbs. will double the yield.

J. H. GRAHAM.

POMARIA, S. C., November 2d, 1872.

Your Wando is good enough for me; nothing better for corn, and as good as any Fertilizer for cotton, potatoes, cabbage, &c.

F. D. GRAHAM.

MILLWAY, October 25th, 1872.

I have used your Fertilizer this year and am well pleased with it. I used 100 lbs. per acre, with good result. I am satisfied it doubled the yield. I will use three tons next year. W. J. McCAIN.

BROOKS STATION, GA., Nov. 9th, 1872.

I applied 75 lbs. Wando per acre on my cotton crop, and am confident that it paid me 75 per cent. I will use it another year.

JOHN W. DUNBAR.

CANOOCHEE, GA., October 23d, 1872.

I consider your Wando a very good manure for cotton, corn and turnips. I have used the Wando three years, and expect to continue using it as long as it is kept up to its present standard.

M. ALEXANDER.

ORANGEBURG, S. C., October 16th, 1872.

I have used your Fertilizer with great success. I applied about 150 lbs. per acre. The season was very dry, notwithstanding it doubled my crop. I expect to use nothing but the Wando, as I have tried several kinds, and find the Wando the best of all for our soil.

DAVID N. CARSON.

PACKSVILLE, S. C., Nov. 11th, 1872.

I used the Wando this year, applying 200 lbs. to the acre, in the drill under the cotton; owing to a severe drought, my cotton did not do as well as it might have done, but nevertheless, from the quick growth and early maturing, I am still highly pleased with the Wando as a Fertilizer, and expect to use it again next year. I have used it three years with success.

CHAS. W. FELDER.

MILLWAY, S. C., Oct. 30th, 1872.

I used your Fertilizer the past season, and it has paid me 200 per cent. on an old broom-straw field, which would not have paid me to have worked it. By putting 100 lbs. to the acre, I made from six to seven hundred pounds cotton seed. I am well pleased with it, and intend using it again on all the cotton I plant the coming season.

W. G. KELLER.

GRIFFIN, GA., Nov. 4th, 1872.

I believe your Wando has no equal, taking into consideration its cheapness, and the perpetual growth to the cotton crop during the season.

I used about 125 lbs. per acre, and it gave me satisfaction in every respect. John Merryman's Guano has attained a fine reputation, and, in fact, it is a good Guano, but I prefer the Wando, because 125 lbs. of Wando did me as much good, per acre, as 250 lbs. of Merryman's. It is not necessary to enter into the details of the Wando Guano, as it has a reputation equal to any, and is commendable everywhere.

Let everybody use the Wando Guano; try it once and you will use it again.

C. B. BOSTEWICK.

DANBURG, GA., Nov. 5th, 1872.

I used Wando at the rate of 100 lbs. in the drill under a part of my cotton. I also used Pendleton's, "Sea Fowls," and Carolina Fertilizer, for which Geo. W. Williams & Co. are agents. I found the Wando to be superior to the latter two, and equal to the former, if we take into consideration the cost of Pendleton's, as it is a high priced manure; but I find it a good article. I can recommend the Wando to all as a superior Manure, and you will find no trouble in selling all you can manufacture. GEO. W. KENDALL.

GRIFFIN, GA., Nov. 1st, 1872.

I used your Fertilizer the past season at the rate of 100 lbs. per acre on old broom sedge land, cultivated in the usual way; the increase yield was about eight times as much as where no fertilizer was used. I expect to use it next year on all the cotton I plant. JAS. A. CRAWLEY.

LEESVILLE, S. C., Nov. 7th, 1872.

I used the Wando at the rate of 100 lbs. per acre on cotton, side by side with stable manure. The Wando was far ahead. I also used 100 lbs. per acre on corn, in my bottom lands, with an increased yield of about two-thirds. I am well pleased with the Wando. J. S. DERRICK.

DYSON MILLS, S. C., Nov. 18th, 1872.

I am well pleased with the Wando Fertilizer. I did not get a stand in cotton until the middle of June, in consequence of dry weather, but notwithstanding, the Wando has doubled my crop. LEWIS CULBREATH.

I have been using the Wando for the past three years on my cotton. I am well pleased with it. I put 200 lbs. to the acre, and will make about 1200 lbs. seed cotton per acre, double what I would make without it. I find that the cotton grows off much faster, and matures earlier, when manured with the Wando. SAMUEL MORGAN.

WARRENTON, GA., Nov. 9th, 1872.

I tried your Fertilizer the past season on poor sandy land; I am satisfied that it has paid me better than any fertilizer I have ever used, and it gives me perfect satisfaction. I do not expect again to use any other but the Wando. T. N. POOL.

POMARIA, S. C., Nov. 16th, 1872.

Where I used the Wando the yield of cotton was at least double that where none was applied. JOSEPH SHEELY.

BUENA VISTA, S. C., Nov. 13th, 1872.

I used the Wando this year at the rate of 200 lbs. per acre, and found that it did well. I am satisfied that it is equal, if not better, for our land than any other Fertilizer that has been used in our part of the country, and I will use it another year.

HENRY M. SMITH.

WRIGHT'S BLUFF, S. C., November 9, 1872.

I have used no other Fertilizer this year but the Wando. I am still pleased with it, and expect to use it next year. I have picked from one acre 1700 lbs. seed cotton, which had 180 lbs. Guano, with a fair manuring of barn-yard litter. Wherever the crop has been well worked, the Wando has paid handsomely.

JOHN D. BROCK.

LEESVILLE, LEXINGTON CO., S. C., Nov. 4th, 1872.

I used one and one-half tons of your Fertilizer; on one portion I put 200 lbs. to the acre, with litter composted, to cotton. I left one row unmanured, and the manured was 200 per cent. better than the unmanured; and on a portion of my farm I used 100 lbs. per acre, and the cotton lacked one-third of being as good as where I used 200 lbs., all planted and worked alike. I think your Fertilizer a splendid article if properly applied to cotton, corn, &c.

H. W. SMITH.

MOFFETTSVILLE, S. C., Nov. 12th, 1872.

I used the Wando Fertilizer on one and one-quarter of an acre, at the rate of 400 lbs.; I gathered from it 2500 lbs. seed cotton, and also used it on eight acres of very poor, worn-out land at the rate of 200 lbs. per acre, and made eight bales cotton from the two fields. It has paid me fully 100 per cent., and I am well pleased with it. I do not expect to plant another crop without it.

J. G. HALL.

BISHOPVILLE, S. C., Nov. 13th, 1872.

I planted eight acres of poor sandy land this year in cotton, and, picked and weighed carefully, I made without any manure 100 lbs. per acre, and with 150 lbs. Wando on the same land, I made 500 lbs. per acre of seed cotton. I also tried it on potatoes, and have doubled my crop.

W. A. BARNES.

MUSH CREEK, S. C., Oct. 29th, 1872.

The Wando that I purchased from your Agent has paid me very well. I applied it at the rate of 130 lbs. per acre, and found that it paid me 100 per cent. I can cheerfully recommend the Wando as a good Fertilizer.

A. A. NEVERS.

LINCOLNTON, N. C., Nov. 4th, 1872.

I have used the Wando this year on a small scale, and am much pleased with its effects.

I used it on cotton, tobacco, corn, potatoes, sugar cane, and all kinds of garden truck. It has done well on all, but more especially on tobacco and cotton.

I think the Wando the best Fertilizer in the country, and advise all the planting community to try it. WM. MULLEN.

RIDGEWAY, S. C., Nov. 18th, 1872.

I have used the Wando extensively this year as usual, and am still quite pleased with it.

The seasons were exceedingly unfavorable, varying from excessive rains to severe drought.

I am satisfied that, with proper preparation and judicious cultivation, the Wando will increase the yield largely any year. I have repeatedly tested the Wando by using it by the side of standard manures, and have always found it equal to the best of them. R. R. VAUN.

BRADFORD SPRINGS, S. C., Nov. 5th, 1872.

I have used the Wando this season with very favorable results. I have not said anything of the season, because I believe, dry or wet, the Wando will double in poor lands. THOS. G. CORBITT.

SPARTANBURG, S. C., Nov. 10th, 1872.

I have used this year the Wando at the rate of 200 lbs. per acre, with the most beneficial results. I am a true believer in the Wando, and expect to use double the quantity next year that I used this.

W. K. P. CALDWELL.

JEFFERSON, GA., Nov. 11th, 1872.

I used four tons of the Wando Fertilizer this year, at the rate of 200 lbs. per acre, under cotton; I used cotton seed, lot and stable manure with it on portion of my land. I am satisfied that it is a good manure; it has done nely for me throughout, either with or without compost. I also used your cid Phosphate this year. I applied 200 lbs. to the acre, mixed with cotton eed, on my corn, on the poorest kind of old sandy land; without any manure he land would not make more than three bushels of corn to the acre, and I m satisfied that I have gathered more than fifteen. I used a part of it with owpen and other rough manure, under cotton, and it did finely.

DOVE SEGARS, SR.

LEESVILLE, S. C., Nov. 4th, 1872.

I broke my land thoroughly, furrowed it off, put out my Guano, at the rate of 150 lbs. to the acre, bedded upon it, and planted my cotton as usual. To test the benefit derived from your Guano, I left a row unmanured; the result was as follows:

1 row, 70 yards long, unmanured, 10 lbs. cotton.
1 " " " manured, 21 " "

As you see, the yield was about or a little over 100 per cent. I like your Guano so well I will use it again next year. J. A. BEDENBAUGH.

CAMDEN, S. C., Nov. 11th, 1872.

I believe the Wando Fertilizer to be superior to any Fertilizer I have used. I applied it on cotton at the rate of 125 lbs. per acre, and made one bale to every two acres, and would have made much more had it not been for the drought. THOS. HOLLAND.

SUMTER, S. C., November 6th, 1872.

I have used the Wando the past season on 34½ acres of land, at the rate of 200 lbs. per acre, and have picked and packed eighteen bales cotton, averaging 456 lbs. per bale, which may be considered a very fine crop for this section of the country, and had it not been for the drought, I would have made 25 bales. I have no hesitation in pronouncing the Wando the best Fertilizer in the market. W. W. ANDERSON, JR.

MAYFIELD, GA., Nov. 16th, 1872.

I used your Fertilizer the past season on grey soil. In justice to your Fertilizer, I would say that it is the first Commercial Fertilizer from the use of which I have ever realized any benefit, and I have tried all, or most, of the leading kinds now in use. A. M. LONG.

SUMTER, S. C., Nov. 19th, 1872.

I experimented the past season with the Wando and Atlantic Fertilizers, with the following results, on very poor sandy soil:

Without manure.....220 lbs. seed cotton.
With 150 lbs. of Atlantic.....380 " " "
With 150 lbs. of Wando.....420 " " "

W. H. KELLY.

STONY POINT, S. C., Nov. 19th, 1872.

I used your Fertilizer the past season on corn, cotton, potatoes and cabbage, and am well pleased with it, and will recommend it to all who want a reliable Fertilizer, and at the same time one that will pay well for the money invested. I will want three times as much next year as I used this.

J. W. BURRISS.

GOWDEYSVILLE, S. C., Nov. 15th, 1872.

The Acid Phosphate I purchased proved a perfect success. I composted 1000 lbs. Acid Phosphate with 1000 lbs. cotton seed about four weeks before the application to the land; when applied, it was put in with a long shovel plough, and the compost put in this furrow, then bedded on with a twisting shovel. Owing to the dry weather, the cotton was slow in coming up, but when it did come it was longer in the shank, and grew off very rapidly. The Acid Phosphate made 32¾ lbs. per row; unmanured, 12¾ lbs. per row. The cotton manured was open three weeks earlier than the unmanured.

J. W. MULLINAX.

LINCOLNTON, N. C., Nov. 10th, 1872.

I have used your Fertilizer the past season, under corn, on land that would not bring five bushels to the acre. I put about a spoonful to each stalk, and gathered twenty bushels per acre. I think that the Wando will pay 100 per cent. on any poor land.

CALEB MOTZ.

GREENVILLE, S. C., Oct. 28th, 1872.

I used your Wando this year and am much pleased with it. I used it side by side with other Fertilizers, but the Wando paid me best, the yield being double to that which was unmanured. I expect to use the Wando in future, as I think it is the best manure in use.

W. H. ASHMORE.

ROCKY WELL, LEXINGTON CO., S. C., Nov. 4th, 1872.

I have used your Fertilizer the past season with entire satisfaction. I have a lot of three acres that I planted last year, applying 800 lbs. Etiwan Fertilizer; the lot made me 1850 lbs. seed cotton. This year I used 334 lbs. Wando Fertilizer on the same lot, and have picked 3750 lbs. seed cotton, and believe that there is about 50 lbs. more open now. It is the best Fertilizer in use for cotton, corn, sugar cane and vegetables. It has paid me two for one the past season, and I would not do without it.

D. T. BARR.

SUNNY SIDE, Nov. 8th, 1872.

I must say that it affords me great pleasure to recommend the Wando. I only used one ton of it last year, at the rate of 100 lbs. per acre, and the yield was double. I used several other Fertilizers, but like the Wando best. I expect to use seven or eight tons next year.

PARKER EASON.

WARRENTON, GA., Nov. 2d, 1872.

I purchased from your Agent, at Warrenton, 1600 lbs. Wando, which I applied to twelve acres of land, and in the middle of the field left two rows unmanured. In my judgment, and that of my neighbors, the manured made fully 200 per cent. more than the unmanured. My experience is, that there should be no land planted without the Wando Fertilizer, for the increased yield will pay fully 100 per cent. above the cost of the Fertilizer.

H. G. KELLY.

WINNSBORO', S. C., Nov. 5th, 1872.

I used ten tons of Wando on my place this season, at the rate of 175 lbs. per acre. My place is one of the oldest in the county, the land, consequently, is very poor. We had a drought in June, the latter part of July and August, but my cotton kept its color until September. I have already picked 700 lbs. per acre, and will have another picking. Without the Wando I would not have made 200 lbs. There runs through my field a public road, and every gentleman passing wishes to know what Fertilizer I have used, as they say that the crop is the best ever seen on the place. S. WOLFE.

ANDERSON, S. C., Nov. 15th, 1872.

I have used your Wando Fertilizer for the past three years on cotton, wheat and corn. I regard it as good as any I have ever used.

P. A. MASTERS.

CAMDEN, S. C., Nov. 21st, 1872.

I have used your Fertilizer for the past three years, and find it just what you recommend it to be, and I can safely say that it has paid me 100 per cent. on all investments. J. W. McCASKILL.

PACKSVILLE, CLARENDON CO., S. C., Nov. 21st, 1812.

I have been using the Wando for the past three years on sandy land, at the rate of 200 lbs. per acre. I am highly pleased with it, and will continue its use.

CHAS. W. FELDER.

TILLER'S FERRY, S. C., Nov. 21st, 1872.

I applied your Wando under cotton with marked success. I planted in the same field, with and without the Wando, giving both lots the same attention and cultivation, and the yield of the Wando was more than double that of the unmanured land.

E. M. HALL.

BLACKVILLE, S. C., October 31st, 1872.

Messrs. W. C. Dukes & Co.:

Notwithstanding the extreme drought my cotton has doubled the yield over the unmanured land by the use of two hundred pounds of the Wando per acre.

Yours, respectfully, H. F. SALLY.

WASHINGTON, GA., October 20th, 1872.

Messrs. W. C. Dukes & Co.:

It gives me much pleasure to state that the Wando fertilizer has given entire satisfaction. I see but very little difference between yours and the Guanape.

Yours, respectfully,

N. J. ROBINSON.

SPARTANBURG, S. C., November 29th, 1872.

I have used the Wando for the past two years with entire satisfaction. Last year the season was dry for four or five weeks in bolling time, though my cotton made at least double what it would have made without tbe Wando. I planted wheat on the same land, and it paid fully one-half the cost of the Wando in its yield. The effect of the Wando could be seen by the bright green color and its rapid growth. This year I used three tons Wando and half ton Guano, and could see no difference in them. A severe hail storm knocked off about one-third of the bolls in my cotton field; the Wando notwithstanding paid me three to one. I used some on corn which paid well, and, in fact, it has paid well on every crop to which I have applied it. Most planters use fertilizer on their poor land; my experience is that 100 pounds on good land pays better than double that quantity on poor soil.

A. T. GREEN.

GRIFFIN, GA., November 28th, 1872.

I used the Wando the last season and am of opinion it is the best fertilizer I ever used. I put 150 pounds to the acre on poor and worn land that would produce about 200 pounds seed cotton to the acre, and the yield with Wando was 1,000 pounds per acre. I used it on better land with entire satisfaction. When I use 100 pounds per acre the increase is fully one-third.

J. R. MAULEY.

CEDAR HILL, S. C., November 23d, 1872.

I used one ton of your Wando, and am well pleased with it. I am sure it paid two hundred per cent. I left one row through the middle of the field unmanured, it only made 1½ pounds seed cotton; the one next to it made 18 pounds seed cotton. I used about 200 pounds per acre; it turned out the best when ginned I ever saw; 1,350 pounds of seed cotton made 508 pounds of lint. My neighbors have spoken to me for my kind of seed, and my advice was to use their seed with Wando, and their's would be as good as mine. I will use it next year

A. B. WESTMORELAND.

FACTS AND FIGURES FOR FARMERS.

This article, like a dictionary, may prove rather dull reading, but, like the dictionary, again, it will prove very useful for reference. The tables are compiled from the best authorities.

DATA IN MECHANICS AND RURAL ECONOMY.

In plane earth excavations, one man ought to execute, each day, ten cubic yards, with spade and wheelbarrow, depositing the dirt at any distance within 120 feet.

One man can cut two cords of pine wood per day; from one cord to one cord and a half, according to the character of the growth, is a good task.

A mason can lay 1,000 bricks per day; one hand attends two.

A pair of sawyers ought to cut 900 superficial feet per week, of pine timber, when the hewing has been previously done, or 600 feet with the hewing.

A man or boy, with a good horse and plough, ought to plough about 1⅓ acre per day, flush, for if he work ten hours, and cut and turn a furrow nine inches wide, he will be required to walk at the rate of three miles per hour to accomplish his task.

Having given the width of furrow slice cut by any plough, the number of hours at work, and the rate at which the team travels per hour, the surface that such plough and team can plough per day, may be calculated after the manner of the above example.

N. B.—In the above example, the acre is assumed to be seventy yards square. An ox team will travel twenty miles a day, and hence may be calculated the quantity of hauling which ought to be done at any given distance, making the proper allowance for the time necessary to load.

A horse team will travel twenty-five miles a day.

A good 4-horse team, on a common road, will haul two cubic yards of stone at three loads.

One gallon, or even 1-10 of a bushel of clover seed to the acre, is a sufficient seeding.

One bushel of ground plaster or gypsum per acre, a sufficient application on clover or other grasses.

MEASURING LAND.

Almost every farmer has some way of measuring land, and the most common is to step off five paces for a rod, and call sixty by sixty-five paces an acre. For common purposes this mode will answer very well, but when the exact measurement of a piece of land is desired, it cannot be depended upon as being at all accurate.

When a field has once been measured correctly a man knows exactly how much seed will be required to put it to grain, and also the exact yield per acre of any crop he may see fit to put upon it.

A light pole just sixteen and a half feet long, is a cheap and convenient measure, but a four-rod tape line is much better.

An exact acre can be found by the following table of distances:

A plot of ground		5	yards wide by		968	yards long,	contains	1 acre.
"	"	10	"	"	484	"	"	"
"	"	20	"	"	242	"	"	"
"	"	40	"	"	121	"	"	"
"	"	80	"	"	60½	"	"	"
"	"	70	"	"	69 1-7	"	"	"
"	"	220	feet wide, by		198	feet wide,	"	"
"	"	440	"	"	99	"	"	"
"	"	110	"	"	369	"	"	"
"	"	60	"	"	726	"	"	"
"	"	120	"	"	363	"	"	"
"	"	240	"	"	181½	"	"	"

ONE ACRE CONTAINS

160 square rods; 4,840 square yards; 43,560 square feet.

ONE ROD CONTAINS

30.25 square yards; 272.25 square feet.
One square yard contains nine square feet.

THE SIDE OF A SQUARE TO CONTAIN

One acre	208.71	feet	12.65	rods	64	paces.
" half acre	147.58	"	8.94	"	45	"
" third acre	120.50	"	7.30	"	37	"
" fourth "	104.36	"	6.32	"	32	"
" eighth "	73.79	"	4.47	"	22½	"

DISTANCES FOR PLANTING TREES, ETC.

Apples, standard, 25 to 33 feet; apples, dwarf, 5 to 8 feet; pears, standard, 20 feet; pears, dwarf, 8 to 10 feet; peaches, headed back, 12 feet; cherries, standard, 20 feet; cherries, dwarf, 8 to 10 feet; plums, standard, 15 feet; plums, dwarf, 8 to 10 feet; quinces, 6 to 8 feet; grapes, 10 to 12 feet; gooseberries and currants, 4 feet; raspberries, 4 feet; blackberries, 6 to 8 feet; strawberries, 2 feet by 15 inches.

For the above distances, the following is the number of trees required for an acre.

One foot by 1.3, 17,424 plants; at 4 feet apart each way, 2,720 trees; at 5 feet apart each way, 1,742 trees; at 6 feet apart each way, 1,200 trees; at 8 feet apart each way, 680 trees; at 10 feet apart each way, 430 trees; at 12 feet apart each way, 325 trees; at 15 feet apart each way, 200 trees; at 18 feet apart each way, 135 trees; at 20 feet apart each way, 110 trees; at 25 feet apart each way, 70 trees; at 30 feet apart each way, 50 trees; at 33 feet apart each way, 40 trees.

QUANTITY OF SEED REQUIRED FOR AN ACRE.

Wheat, 1½ to 2 bushels; rye, 1½ bushels; oats, 3 bushels; barley, 2 bushels; peas, 2 to 3 bushels; white beans, 1½ bushels; buckwheat, ½ bushel; corn, broadcast, for fodder, 4 bushels; corn, in drills, for fodder, 2 to 3 bushels; corn, in hills, 4 to 8 quarts; broom corn, ½ bushel; potatoes, 10 to 15 bushels; beets, 3 lbs.; carrots, 2 lbs.; ruta-baga, ¾ lb.; millet, ¼ bushel; clover, white, 4 quarts; clover, red, 8 quarts; Timothy, 6 quarts; orchard grass, 2 bushels; red top, 1 to 2 pecks; Kentucky blue grass, 2 bushels; mixed lawn grass, 1 to 2 bushels; tobacco, 2 ounces.

QUANTITY OF GARDEN SEEDS TO PLANT.

Asparagus.—One ounce produces 1,000 plants; requires a seed-bed of about 12 feet.

Asparagus Roots.—1,000 plants, bed 4 feet wide and 225 feet long.

Beans.—One quart plants from 100 to 150 feet of row, or 150 to 200 hills.

Beets.—One ounce plants 150 feet of row.

Broccoli.—One ounce gives 2,500 or 3,000 plants, requiring 40 square feet of ground.

Brussel's Sprouts.—Same as broccoli.

Cabbage.—Early sorts, the same as broccoli; the later require 60 feet of ground.

Cauliflower.—The same as late cabbage.

Carrot.—Three or four pounds to the acre; one ounce to 150 feet of row.

Celery.—One ounce gives 7,000 or 8,000 plants; requiring 80 feet of ground.

Cucumber.—One ounce for 150 hills.

Cress.—One ounce sows bed 16 feet square.

Egg Plant.—One ounce gives 2,000 plants.

Endive.—One ounce gives 3,500 plants; requiring 80 feet of ground.

Kale.—Same as broccoli.

Leek.—One ounce gives 2,000 plants; requiring 60 feet of ground.

Lettuce.—One ounce gives 7,000 plants; requiring seed-bed of 120 feet.

Melon.—One ounce for 120 hills.

Nasturtions.—One ounce sows 25 feet of row.

Onion.—Four or five lbs. to the acre; one ounce of seed sows 200 feet of row.

Okra.—One ounce sows 200 feet of row.

Parsley.—One ounce sows 200 feet of row.

Parsnip.—One ounce sows 250 feet of row.

Peppers.—One ounce gives 2,500 plants.

Peas.—One quart of smaller sorts sows 120 feet of row; of larger, 200 feet of row.

Radish.—One ounce to 100 feet.

Salsify.—One ounce to 150 feet of row.

VALUE OF FOOD FOR DOMESTIC ANIMALS.

The figures giving the number of pounds of any one substance to be equal to the quantity given of any other—the results of experiments:

Good hay, 100 lbs.; good clover hay, 95 lbs.; rye straw, 355 lbs.; oat straw, 220 lbs.; potatoes, 195 lbs.; carrots, 280 lbs.; beets, 346 lbs.; ruta-bagas, 262 lbs.; wheat, 43 lbs.; peas, 44 lbs.; beans, 46 lbs.; rye, 49 lbs.; barley, 51 lbs.; Indian corn, 56 lbs.; oats, 59 lbs.; buckwheat, 64 lbs.; oil cake, 64 lbs.

WEIGHT OF GRAIN.

Wheat is 60 lbs. to the bushel in all the States, except Connecticut, where it is 56 lbs.; rye is 56 lbs. in nearly all the States; corn, 56 in nearly all, but 58 in New York; oats, 32 lbs.; barley, 48 lbs.; buckwheat, 46 to 50, but mostly 48 lbs.; clover seed, mostly 60 lbs., but 64 in Ohio and New Jersey; Timothy, 44 lbs.; flax seed, 56 lbs.; potatoes, 60 lbs.; beans, mostly 60, but 62 in New York, and 56 in Ohio; blue grass seed, 14 lbs.; hemp seed, 44 lbs.; dried peaches, 28 to 33 lbs.; dried apples, 22 to 28 lbs.

CONSUMPTION OF HAY.

The hay consumed by different animals does not vary greatly from 3 lbs. daily for each hundred pounds of the animals. The following table is the result of various experiments, by different persons, and will be useful for farmers who wish to determine by calculation, beforehand, how their hay will hold out for the winter, 500 cubic feet of Timothy hay, in a full bay, being about one ton:

Working horses, 3.08 lbs.; working oxen, 2.40 lbs.; milch cows, (Boussingault's,) 2.25 lbs.; milch cows, (Lincoln's,) 2.40 lbs.; young, growing cattle, 3.08 lbs.; steers, 2.84 lbs.; dry cows, 2.42 lbs.; pigs, (estimated,) 3.00 lbs.; sheep, 3.00 lbs.

TO MEASURE GRAIN IN THE GRANARY.

Divide the cubic feet by 56, and multiply by 45, and the result will be struck measure.

TO MEASURE CORN IN THE CRIB.

Multiply the length, breadth and height together, in feet, to obtain the cubic feet; multiply this product by 4, and strike of the right figure, and the result will be shelled bushels, nearly.

UNITED STATES BUSHEL AND GALLON.

The United States bushel is 2,150.40 cubic inches.
The gallon, 231 cubic inches.
The dry measure gallon, or one-eighth of the bushel, is 268.8 cubic inches.

WEIGHTS OF A CUBIC FOOT.

Of various substances, from which the bulk of a load of one ton may be easily calculated:

Cast-iron, 450 lbs.; water, 62 lbs.; white pine, seasoned, about 30 lbs.; white oak, seasoned, about 52 lbs.; loose earth, about 95 lbs.; common soil, compact, about 124 lbs.; clay, about 135 lbs.; clay, with stones, about 160 lbs.; brick, about 125 lbs.

HOUSEHOLD WEIGHTS AND MEASURES.

Wheat flour, 1 pound is one quart.
Indian meal, 1 pound 2 ounces is 1 quart.
Butter, when soft, 1 pound 1 ounce is 1 quart.
Loaf sugar, broken, 1 pound is 1 quart.
White sugar, powdered, 1 pound 1 ounce is 1 quart.
Best brown sugar, 1 pound 2 ounces is 1 quart.
Eggs, average size, 10 are 1 pound.

LIQUID MEASURE.

Sixteen tablespoonsful are half a pint.
Eight tablespoonsful are 1 gill.
Four tablespoonsful are half a gill.
A common sized tumbler holds half a pint.
A common sized wineglass holds half a gill.

Table showing the number of spaces contained in an acre of land at various given distances, which will be found useful in fixing the proper distances to place Marl, Lime or other Manures, so as to give any desired quantity to the acre.

FEET.		FEET.	SPACES.	FEET.		FEET.	SPACES.	FEET.		FEET.	SPACES.
40	by	40	27	19	by	18	127	16	by	13	209
39	"	39	28	19	"	17	134	16	"	12	226
38	"	38	30	19	"	16	143	16	"	11	247
37	"	37	31	19	"	15	152	16	"	10	272
36	"	36	33	19	"	14	163				
35	"	35	35	19	"	13	176	15	"	15	193
34	"	34	37	19	"	12	191	15	"	14	207
33	"	33	40	19	"	11	208	15	"	13	223
32	"	32	42	19	"	10	229	15	"	12	242
31	"	31	45					15	"	11	264
30	"	30	48	18	"	18	134	15	"	10	290
29	"	29	51	18	"	17	142				
28	"	28	55	18	"	16	151	14	"	14	222
27	"	27	59	18	"	15	161	14	"	13	239
26	"	26	64	18	"	14	172	14	"	12	259
25	"	25	69	18	"	13	186	14	"	11	282
24	"	24	75	18	"	12	201	14	"	10	311
23	"	23	82	18	"	11	220				
22	"	22	90	18	"	10	242	13	"	13	257
21	"	21	98					13	"	12	279
20	"	20	108	17	"	17	150	13	"	11	304
20	"	19	114	17	"	16	160	13	"	10	335
20	"	18	121	17	"	15	170				
20	"	17	128	17	"	14	180	12	"	12	302
20	"	16	136	17	"	13	197	12	"	11	330
20	"	15	145	17	"	12	213	12	"	10	363
20	"	14	155	17	"	11	232				
20	"	13	167	17	"	10	256	11	"	11	360
20	"	12	181					11	"	10	396
20	"	11	198	16	"	16	170				
20	"	10	217	16	"	15	181	10	"	10	435
19	"	19	120	16	"	14	194				

Mineral constituents absorbed or removed from an acre of soil by several crops. (Johnson.)

	Wheat. 25 bushels. Lbs.	Barley. 40 bushels. Lbs.	Turnips. 20 tons. Lbs.	Hay. 15 tons. Lbs.
Potassa	29.6	17.5	47.1	38.2
Soda	3.	5.2	8.2	12.
Lime	12.9	17.	29.9	44.5
Magnesia	10.6	9.2	19.7	7.1
Oxide of iron	2.6	2.1	7.1	.6
Phosphoric acid	20.6	25.8	46.3	15.1
Sulphuric acid	10.6	2.7	13.3	9.2
Chlorine	2.	16.	3.6	4.1
Silica	118.1	129.5	247.8	78.2
Alumina	...	2.4	...	...
Total	210	213	423	209

Table showing the Period of Reproduction and Gestation in Domestic Animals.

KINDS OF ANIMALS.	Proper Age for Reproduction.	Period of the Power of Reproduction.	Number of Females for one Male.	Period of Gestation and Incubation.		
				Shortest Period.	Mean Period.	Longest Period.
		Years.		Days.	Days.	Days.
Mare	4 years.	10 to 12	.....	322	347	419
Stallion	5 "	12 to 15	20 to 30	.....	.....	.....
Cow	3 "	10 to 14	.....	240	283	321
Bull	3 "	8 to 10	30 to 40	.....	.....	.....
Ewe	2 "	6	.....	146	154	161
Tup	2 "	7	40 to 50	.....	.....	.....
Sow	1 "	6	.....	109	115	143
Boar	1 "	6	6 to 10	.....	.....	.....
She Goat	2 "	6	.....	150	156	163
He Goat	2 "	5	20 to 40	.....	.....	.....
She Ass	4 "	10 to 12	.....	365	380	391
He Ass	5 "	12 to 15	.....	.....	.....	.....
She Buffalo	.....	.....	.....	281	308	335
Bitch	2 "	8 to 9	.....	55	60	63
Dog	2 "	8 to 9	.....	.....	.....	.....
She Cat	1 "	5 to 6	.....	48	50	56
He Cat	1 "	9 to 10	5 to 6	.....	.....	.....
Doe Rabbit	6 mos.	5 to 6	.....	20	28	35
Buck Rabbit	6 "	5 to 6	30	.....	.....	.....
Cock	6 "	5 to 6	12 to 15	.....	.....	.....

PERIODS OF INCUBATION OF DOMESTIC POULTRY.

The "*mystical numeral*" seven has been held to have some wonderful influence over the eggs of birds; and because there are seven days in the week, "seven last plagues," "seven phials of wrath," seven stars in the Pleiades, and seven of a great many other things, it has been harped upon as most astonishing that birds should regulate their time of sitting, or eggs of hatching, by sevens also. Thus—the hen sits 3 times 7 days, the goose 4 times 7, the duck 5 times 7, and so on. The wonder ceases when we know the actual number of days required for the incubation of fresh eggs, which is as follows:

Pigeons sit	18 days.	Musk ducks sit	36 days.
Hens "	21 "	Pea fowls "	28 "
Guinea hens sit	25 "	Geese "	29 "
Turkeys "	26 "	Ducks "	26 to 33 "

Swans sit 6 to 8 weeks.

TABLE FOR BEST TIME TO SOW SEED.

Vegetable Seeds that may be sown in the latitude of Charleston from the first of January to the end of February, Thermometer in the shade averaging 45 degrees.—Beet, carrot, cress, celery, cabbage, cauliflower, endive, English or Windsor beans, kale, Irish potatoes, lettuce, mustard, parsley, parsnip, onions, peas, radish, turnip, spinach, sugar corn, Swiss chard.

Vegetable Seeds that may be sown in the open ground in the latitude of Charleston from the first of March to the end of April, Thermometer in the shade averag-

ing 60 degrees.—Lima beans, bush beans, cranberry, pole beans, scarlet runner beans, sugar corn, musk melon, mango, balsam apple, okra, water melon, tanyah, squash, pumpkin, tomato, nasturtium, cucumber, egg plant, sweet potatoes.

It will be understood that these dates refer only to this latitude. Farther South, operations should be begun earlier; farther North, later.

Nutritious Properties of different Vegetables and Oil Cake, compared with eacl other in quantities.—Oil cake, 1; peas and beans, 1.5; rice, 1.6; wheat, grain, 2.5; wheat, flour, 2; oats, 2.5; rye, 2.5; bran, wheat, 2.75 and 3; corn, 3; barley, 3; pea straw, 3; clover hay, 4; hay, 5; potatoes, 14; old potatoes, 20; carrots, 17.5; cabbages, 18; wheat straw, 26; barley, 26; oat, 27.5; turnips, 30.

Illustration.—1 lb. of oil cake is equal to 18 lbs. of cabbage.

YIELD OF OIL FROM SEVERAL SEEDS.

Poppy, 56 to 63 per cent.; cress, 56 to 58; castor, 25; sunflower, 15; hemp, 14 to 25; linseed, 11 to 22.

Average quantity of Tannin in several substances, (Morfit.)—Catechu, Bombay, 55 per cent.; catechu, Bengal, 44; kino, 75; nut galls, Aleppo, 65; nut galls, Chinese, 69; oak, old, inner bark, 14.2; oak, young, inner bark, 15.2; oak, young, entire bark, 6; oak, young, spring cut bark, 22; oak, young, roc bark, 8.9; chestnut, American rose, bark, 8; chestnut, horse rose, 2; sassafras root bark, 58; sumac, Sicily and Malaga, 16; sumac, Virginia, 10; sumac, Carolina, 5; willow, inner bark, 16; willow, weeping, 16; sycamore bark, 16; tan shrub bark, 13; cherry tree, 24; tormentil root, 46; corneus sanguinea, 44; alder bark, 36.

FACTS ABOUT WEEDS.

Dr. Lindley estimates as a low average the following number of seeds from each of these four plants:

1 plant of Groundsel produces		2,080	16,360 plants.
1 " Dandelion "		2,740	
1 " Sow Thistle "		11,040	
1 " Spurge "		540	

Or enough seed from these four plants to cover three acres and a half, at three feet apart. To hoe this land, he says, will cost 6s. (sterling) per acre, and hence a man throws away 5s. 3d. a time as often as he neglects to bend his back to pull up a young weed before it begins to fulfil the first law of nature. He recommends every farmer whose vertebral column will not bend to count the number of dandelions, sow thistles, etc., on the first square rod he can measure off.

This operation may be repeated in this country by applying all the above estimates to crab grass, burdock, fox tail, chick weed and purslane.

This BOOK may be kept out ***TWO WEEKS ONLY,*** and is subject to a fine of FIVE CENTS a day thereafter. It was taken out on the day indicated below: